

	Field	Acres	Buffer	Net Ac.	Latitude	Long.	FSN#	Tract	Field	Tax ID #	RPC#
Shannon Simmons	RO80-1	6.4	1.4	5.0	37.222	-79.678	4963	6895	2	194 A 31	19403800
	RO80-2	6.4	1.1	5.3	37.221	-79.677	4963	6895	2-3	194 A 31	19403800
	RO80-3	5.2	1.6	3.6	37.221	-79.676	4963	6895	3	194 A 31	19403800
	RO80-4	6.2	3.4	2.8	37.221	-79.675	4963	6895	4	194 A 31	19403800
	RO80-5	13.9	3.0	10.9	37.222	-79.674	4963	6895	9	194 A 31	19403800
	RO80-6	6.5	1.7	4.8	37.224	-79.675	4963	6895	8	194 A 31	19403800
	RO80-7	7.2	3.6	3.6	37.222	-79.671	4963	6895	10	194 A 31	19403800
	RO80-8	22.0	6.8	15.2	37.224	-79.671	4963	6895	10	194 A 31	19403800
	RO80-9	9.9	3.0	6.9	37.222	-79.682	4963	6869	8	194 A 32	19403900
	RO80-10	33.2	7.9	25.3	37.220	-79.682	4963	6869	1 & 8	194 A 32	19403900
	RO80-11	24.8	3.6	21.2	37.219	-79.684	1142	1711	5	194 A 36	19404600
	RO80-12	9.4	2.6	6.8	37.218	-79.683	1142	1711	2	194 A 36	19404600
	RO80-13	20.7	6.3	14.4	37.218	-79.687	4963	1710	1	194 A 15	19401600
										194 A 16	19401700
	RO80-14	38.4	6.7	31.7	37.218	-79.688	4963	1710	1	194 A 15	19401600
										194 A 16	19401700
	RO80-15	67.8	30.2	37.6	37.213	-79.681	4210	3995	1-5	194 A 43	19405500
	RO80-16	26.9	9.2	17.7	37.203	-79.689	4963	6881	20	208 A 4	20800300
	RO80-17	7.9	3.8	4.1	37.204	-79.693	4963	6881	20	208 A 1	20800000
	RO80-18	9.3	2.9	6.4	37.205	-79.696	4963	6881	6	208 A 2	20800100
	RO80-19	3.4	2.0	1.4	37.204	-79.695	4963	6881	6	208 A 2	20800100
	RO80-20	7.6	2.1	5.5	37.202	-79.695	4963	6881	12	208 A 1A	90505219
	RO80-21	12.4	2.9	9.5	37.203	-79.697	4963	6881	16	208 A 2	20800100
	RO80-22	5.5	3.7	1.8	37.201	-79.699	4963	6881	7 & 11	208 A 3A	20800201
	RO80-23	28.9	12.7	16.2	37.201	-79.703	4963	6881	1	208 A 3A	20800201
	TOTALS	379.9		257.7							

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11/13/2015 between Carolyn P. Simmons referred to here as "Landowner", and Bio-Normic, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Bedford City, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
		194 A 16	194 01 200
		194 A 15	194 01 600
		194 A 36	194 04 600
		194 A 32	194 03 900
		194 A 31	194 03 800

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Carolyn P. Simmons
Landowner - Printed Name, Title

Carolyn P. Simmons
Signature

10247 Streetsville Rd
Vinton VA 24179
Mailing Address

540-309-3944

Permittee:

Bio-Normic, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Vaughn Buck Stevenson
Permittee - Authorized Representative
Printed Name

Vaughn Buck Stevenson
Signature

516 Rowntree Rd
Charlotte, NC 28217
Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services

County or City: Bedford County

Landowner: Carolyn P. Simmons

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Carolyn P. Simmons
Landowner's Signature

11-13-13
Date

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11/13/2015 between Garland L. Simmons referred to here as "Landowner", and Bio-Nomic Svc, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Bedford Ctr, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
		194 A 16	19401700
		194 A 15	19401600
		194 A 36	19404600
		194 A 32	19403900
		194 A 31	19403800

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<u>Garland L. Simmons</u>	<u>Garland L. Simmons</u>	<u>1190 Horseshoe Rd 10</u>
Landowner - Printed Name, Title	Signature	Mailing Address

Permittee:

Bio-Nomic Svc, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

<u>Vaughn "Buck" Stevenson</u>	<u>Vaughn "Buck" St</u>	<u>516 Roundtree Rd</u>
Permittee - Authorized Representative	Signature	Mailing Address
Printed Name		<u>Charlotte, NC 28217</u>

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services

County or City: Bedford County

Landowner: Garland L. Simmons

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil.
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days.
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Garland L. Simmons
Landowner's Signature

11-13-15

Date

[Search](#)[Results](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) | [Log On](#)[Printer-Friendly](#)[View In Map](#)**Tax Map #**

194 A 31

Link

194 A 31

Parcel Number(RPC).

19403800

Address

1190 HORSESHOE BEND ROAD

[Link to Real Estate Lookup/Sketch](#)**Parcel Information****Valuation****Improvements****Ownership History****General Information****Owner:**

SIMMONS GARLAND L & CAROLYN P

Legal Acreage:

108.9600

Additional Owner:**PCDesc:**

6 Agricultural/Undevl(100+ac)

Owner Address:1190 HORSESHOE BEND ROAD
MONETA, VA 24121**Legal Description:**

STONY CR

Document Number:**Land Use****Tax Year:**

1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

R080-1

R080-2

R080-3

R080-4

R080-5

R080-6

R080-7

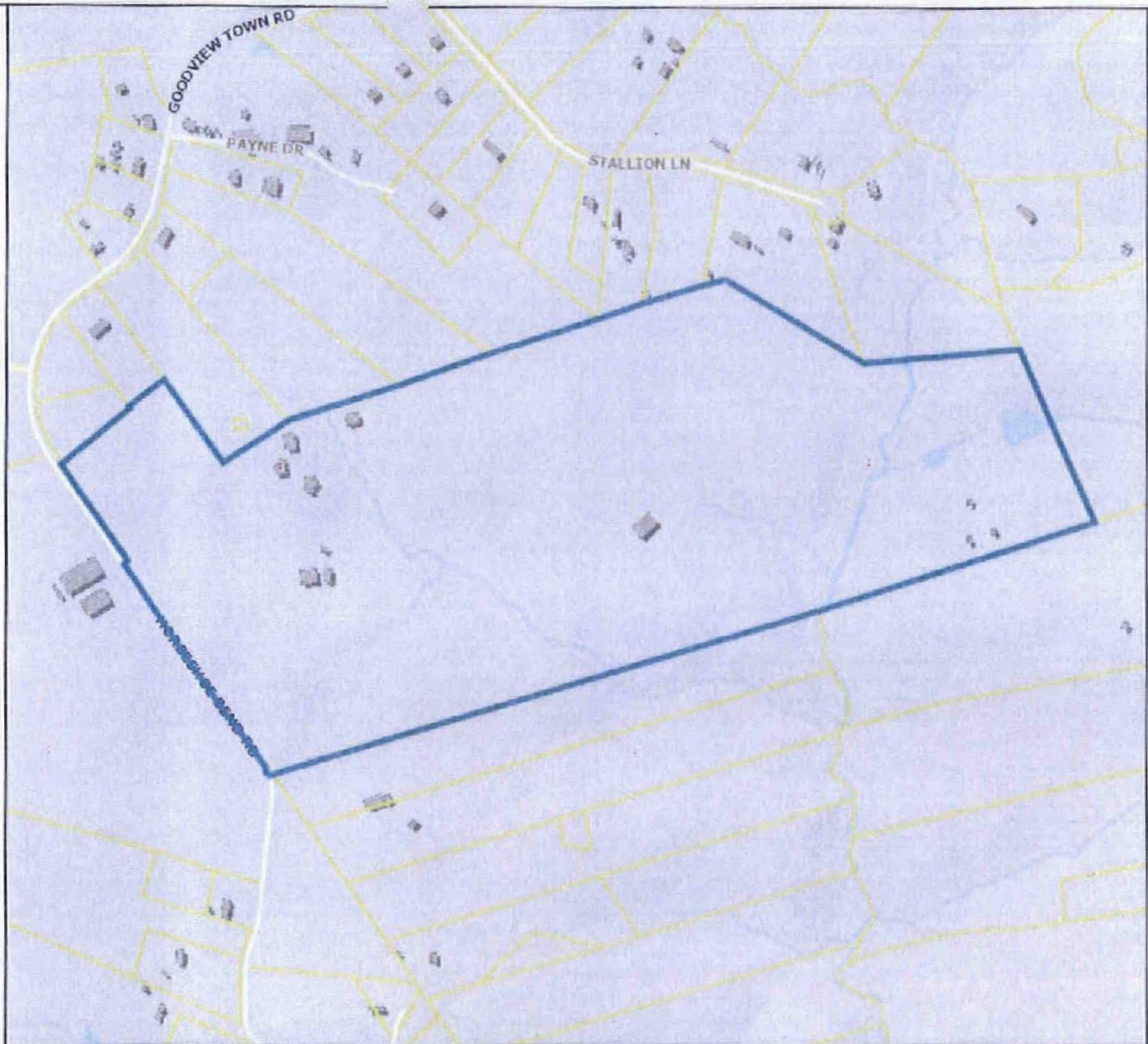
R080-8

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

RO80-1
RO80-2
RO80-3
RO80-4
RO80-5
RO80-6
RO80-7
RO80-8





Title: Simmons Garland L&Carolyn P 194 A 31 19403800

Date: 3/17/2016

Feet
0 200 400 600 800
1:9,028 / 1"=752 Feet

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

 [Printer-Friendly](#)[View In Map](#) **Tax Map #**

194 A 32

Link

194 A 32

Parcel Number(RPC)

19403900

Address

1191 HORSESHOE BEND ROAD

[Link to Real Estate Lookup/Sketch](#)**Parcel Information****Valuation****Improvements****Ownership History****General Information****Owner:**

SIMMONS GARLAND L & CAROLYN P

Legal Acreage:

51.8200

Additional Owner:**PCDesc:**

5 Agricultural/Undeveloped(20-99ac)

Owner Address:1190 HORSESHOE BEND ROAD
MONETA, VA 24121**Legal Description:**

STONY CREEK

Document Number:**Land Use****Tax Year:** 1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

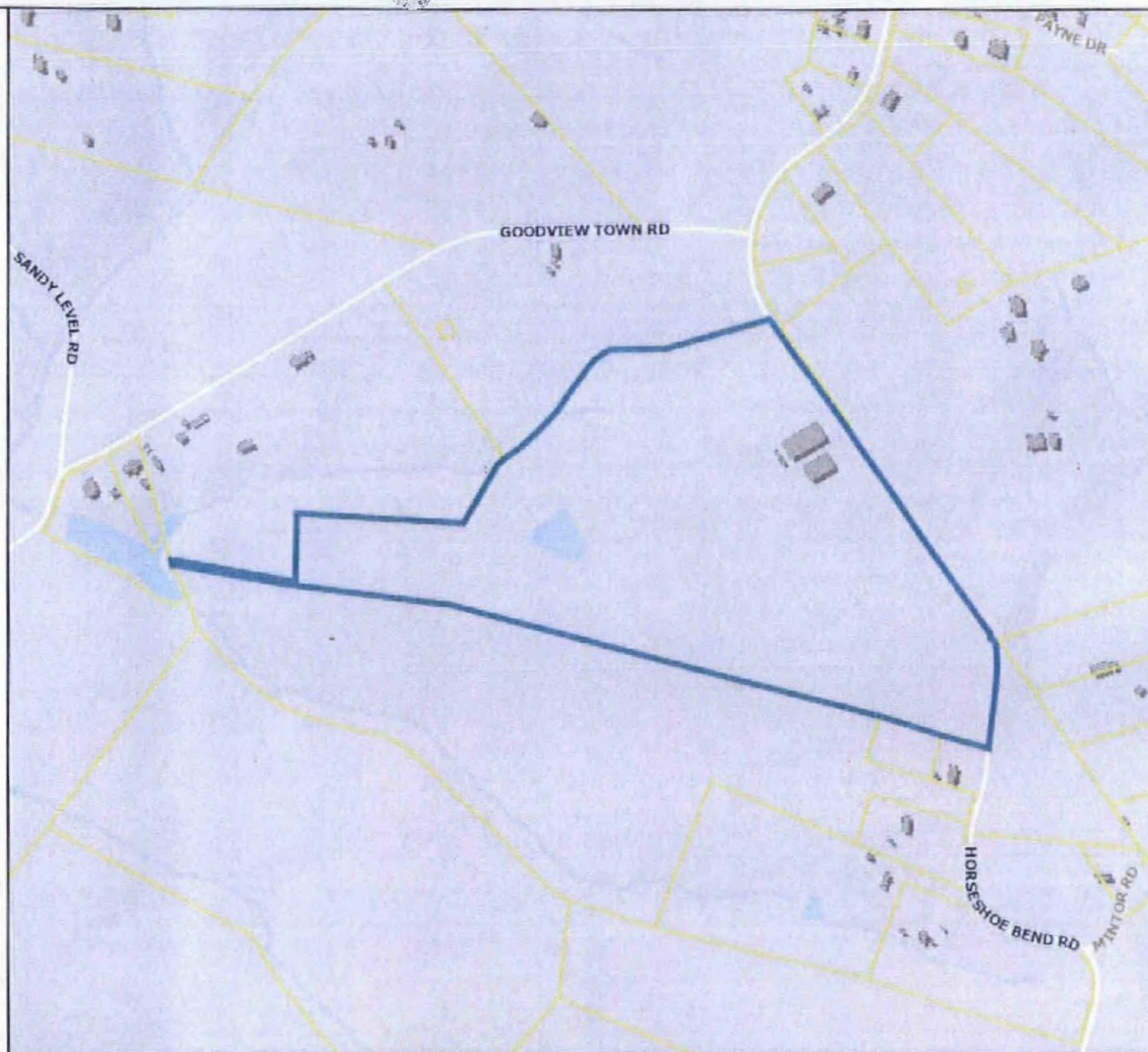
P680-9
2080-10

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

R080-9
R080-10



Title: Simmons Garland L&Carolyn P 194 A 32 19403900

Date: 3/17/2016

Feet

0 200 400 600 800
1:9,028 / 1"=752 Feet

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 3/7/2016 between Chad A. SIMMONS referred to here as "Landowner", and Bio-Nova Services, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Redford Cty, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>194 A 36</u>	<u>19409600</u>		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<u>Chad Albert SIMMONS</u>	<u>Chad A Simmons</u>	<u>1190 Horseshoe Bend Rd</u>
Landowner - Printed Name, Title	Signature	Mailing Address
		<u>Mecklenburg VA 24121</u>

Permittee:

Bio-Nova's Svc, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

<u>Vaughn Buck Stevenson</u>	<u>Vaughn Bud Steu</u>	<u>516 Rowntree Ad</u>
Permittee - Authorized Representative	Signature	Mailing Address
Printed Name		<u>Charlotte, NC 28217</u>

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services
Landowner: Chad A. Simmons

County or City: Bedford County

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil.
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:


 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Chad A. Simmons

Landowner's Signature

Mar 7 2016

Date

[Search](#)[Results](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) | [Log On](#) [Printer-Friendly](#)[View In Map](#) 

Tax Map #	Link	Parcel Number(RPC)	Address
194 A 36	194 A 36	19404600	1507 HORSESHOE BEND ROAD
Link to Real Estate Lookup/Sketch			

[Parcel Information](#)[Valuation](#)[Improvements](#)[Ownership History](#)**General Information**

Owner:	SIMMONS GARLAND L & CAROLYN & CHAD A	Legal Acreage:	42.6600
Additional Owner:		PCDesc:	5 Agricultural/Undeveloped(20-99ac)
Owner Address:	1190 HORSESHOE BEND RD MONETA, VA 24121	Legal Description:	JUMPING RUN
		Document Number:	130011351

Land Use**Tax Year:** 1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

R0 80-11

R0 80-12

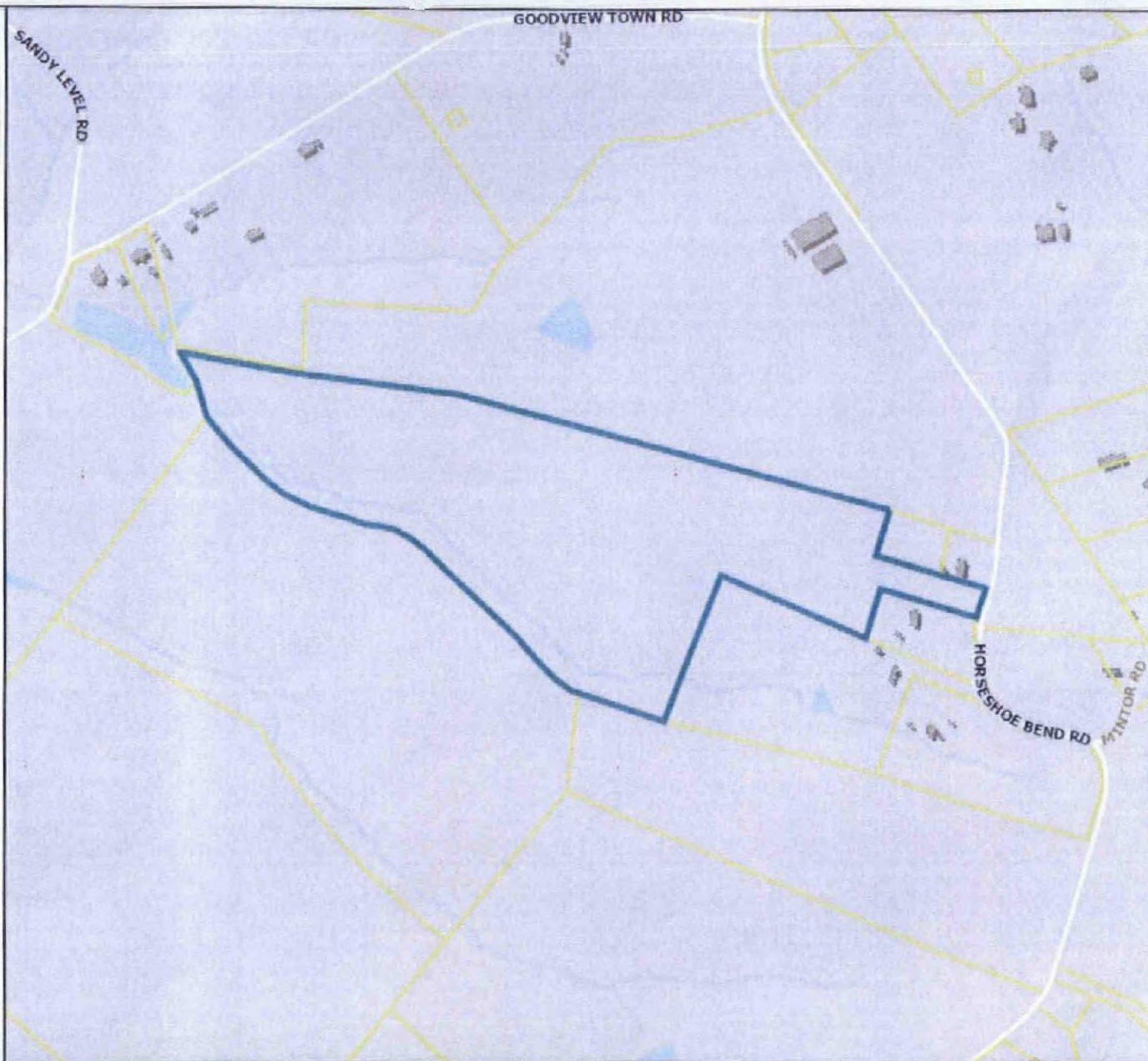
Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

RD 80-11

RD 80-12



Title: Simmons Garland L&Carolyn&Chad 194 A 36


Date: 3/17/2016

19404600

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Feet

0 200 400 600 800
1:9,028 / 1"=752 Feet

 [Printer-Friendly](#)[View In Map](#) 

Tax Map #	Link	Parcel Number(RPC)	Address
194 A 15	194 A 15	19401600	

[Link to Real Estate Lookup/Sketch](#)

[Parcel Information](#)[Valuation](#)[Improvements](#)[Ownership History](#)**General Information**

Owner:	SIMMONS GARLAND L & CAROLYN P	Legal Acreage:	42.8300
Additional Owner:		PCDesc:	5 Agricultural/Undevel(20-99ac)
Owner Address:	1190 HORSESHOE BEND ROAD MONETA, VA 24121	Legal Description:	JUMPING RUN
		Document Number:	970011539

Land Use

Tax Year: 1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

PART 2080-13

PART 2080-14

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

PART R080-13
PART R080-4



Title: Simmons Garland L&CarolynP 194 A 15 19401600

Date: 3/17/2016

Feet

0 200 400 600 800
1:9,028 / 1"=752 Feet

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

 [Printer-Friendly](#)[View in Map](#) 

Tax Map #

194 A 16

Link

194 A 16

Parcel Number(RPC).

19401700

Address

2363 GOODVIEW TOWN ROAD

[Link to Real Estate Lookup/Sketch](#)

Parcel Information

Valuation

Improvements

Ownership History

General Information

Owner:

SIMMONS GARLAND L & CAROLYN P

Legal Acreage:

48.4700

Additional Owner:

PCDesc:

5 Agricultural/Undeveloped(20-99ac)

Owner Address:

1190 HORSESHOE BEND ROAD
MONETA, VA 24121

Legal Description:

JUMPING RUN

Document Number:

970011539

Land Use

Tax Year: 1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

PART R080-13

PART R080-14

Bedford, VA

Legend

Highway

Blue Ridge Parkway

US Primary

Virginia Primary

Roads

Parcels - County

Parcels - Town

Public School Boundary

PART R080-13

PART R080-14



Title: Simmons Garland L&CarolynP 194 A 16 19401700

Date: 3/17/2016

Feet

0 200 400 600 800
1:9,028 / 1"=752 Feet

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PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

Landowner:

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services County or City: Bedford County
Landowner: Shannon Lewis Simmons

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Shannon Lewis Simmons
Landowner's Signature

11-13-15

Date

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 7/14/11 between Lillian Simmons referred to here as "Landowner", and Bio-Nomic Services, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Berkeley County, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>108 A 3A</u>	<u>20800201</u>	<u>194 A 43</u>	<u>19405500</u>
<u>208 A 1A</u>	<u>90505219</u>		
<u>208 A 2</u>	<u>20800100</u>		
<u>208 A 1</u>	<u>20800000</u>		
<u>208 A 4</u>	<u>20800300</u>		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Lillian Simmons Co owner
Landowner - Printed Name, Title

Lillian Simmons
Signature

1833 Todd Lane, Moneta, VA 24121
Mailing Address

Permittee:

Bio-Nomic Services the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☒ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Vaughn "Bwok" Stevenson
Permittee - Authorized Representative
Printed Name

Donald Boone
Signature

516 Rowatree Rd
Charlotte, NC 28217
Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services
Landowner: Lillian Simmons

County or City: Bedford County

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

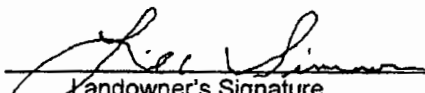
I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).


Landowner's Signature

7-14-16
Date

Bedford County, Virginia

Tax Map #: 194 A 43

Link: 194 A 43

Parcel
Number(RP
C): 19405500Address: 2085 HORSESHOE
BEND ROAD

Parcel Information

Owner : SIMMONS SHANNON L & SIMMONS LILLIAN
Additional Owner: No Data
Owner Address: 1833 JOCO LANE MONETA VA 24121

Legal Acreage: 68.3400
PCDesc: 5 Agricultural/Undeveloped(20-99ac)
Legal Description: VA RWY
Document Number: 160003612

Valuation Information

Map : 194 A 43
Name: S & S FARMS INC
Acreage: 68.34

Deedbook No Data
Deedpage: No Data

Year	Land Value	Improvement Value	Total Value
2016	\$371,700.00	\$46,100.00	\$417,800.00
2015	\$371,700.00	\$46,100.00	\$417,800.00
2014	\$371,700.00	\$45,500.00	\$417,200.00
2013	\$371,700.00	\$45,500.00	\$417,200.00
2012	\$371,700.00	\$45,500.00	\$417,200.00
2011	\$371,700.00	\$45,500.00	\$417,200.00
2010	\$371,700.00	\$45,500.00	\$417,200.00
2009	\$371,700.00	\$45,500.00	\$417,200.00
2008	\$371,700.00	\$45,500.00	\$417,200.00
2007	\$371,700.00	\$45,500.00	\$417,200.00
2006	\$114,300.00	\$0.00	\$114,300.00
2005	\$114,300.00	\$0.00	\$114,300.00
2004	\$114,300.00	\$0.00	\$114,300.00
2003	\$114,300.00	\$0.00	\$114,300.00
2002	\$77,000.00	\$1,600.00	\$78,600.00
2001	\$77,000.00	\$1,600.00	\$78,600.00
2000	\$77,000.00	\$1,600.00	\$78,600.00
1999	\$77,000.00	\$1,600.00	\$78,600.00
1998	\$62,000.00	\$1,600.00	\$63,600.00

12080-15

Improvement

Structure use:	Single family	Rooms Total:	3
Building Type:	112 Conventional	Bedrooms:	1
Frame Material:	Wood frame	Full Bathroom:	1
Exterior Cover :	Vinyl siding	Half Bathroom:	0
Exterior Cover:	No Data	Attic:	None
Year Built:	1	Heating:	Electric baseboard
Stories :	1.0	Cooling :	N
Foundation:	1/2 Crawl	Roof:	Gable
Finish Size Sq Ft:	588	Roof Material:	Metal
Basement Sq Ft:	0	Masonry Fireplace :	N
Garage Sq Ft:	No Data	Condition:	normal for age
Detached Garage Sq Ft:	No Data		
DeckSq Ft:	196		

Current Owner

Current Owner:	SIMMONS SHANNON L & SIMMONS LILLIAN
Purchase Date:	04/29/2016
Purchase Price:	\$.00
Land Description:	9 Homesite

Past Owner

Name:	S & S FARMS INC	Name:	S & S FARMS INC
Purchase Date:	08/06/2002	Purchase Date:	08/06/2002
Purchase Price:	\$250,000.00	Purchase Price:	\$250,000.00

The County of Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

POSD-15



Feet
0 200 400 600 800
1:9,028 / 1"=752 Feet

Title: Parcels - County SHANNON + LILLIAN SIMMONS 194-A-43 Date: 7/25/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Bedford County, Virginia

Tax Map #: 208 A 4

Link: 208 A 4

Parcel
Number(RP
C): 20800300

Address:

Parcel Information

Owner : SIMMONS SHANNON L & SIMMONS
LILLIAN
Additional Owner: No Data
Owner Address: 1833 JOCO LANE MONETA VA 24121

Legal Acreage: 30.0300
PCDesc: 5 Agricultural/Undevl(20-99ac)
Legal Description: TRACT 19 PB 42/296
Document Number: 160003611

Valuation Information

Map : 208 A 4
Name: SIMMONS GARLAND L & CAROLYN
P
Acreage: 30.03

Deedbook No Data
Deedpage: No Data

Year	Land Value	Improvement Value	Total Value
2016	\$150,200.00	\$0.00	\$150,200.00
2015	\$150,200.00	\$0.00	\$150,200.00
2014	\$150,200.00	\$0.00	\$150,200.00
2013	\$150,200.00	\$0.00	\$150,200.00
2012	\$150,200.00	\$0.00	\$150,200.00
2011	\$150,200.00	\$0.00	\$150,200.00
2010	\$150,200.00	\$0.00	\$150,200.00
2009	\$150,200.00	\$0.00	\$150,200.00
2008	\$161,100.00	\$0.00	\$161,100.00
2007	\$161,100.00	\$0.00	\$161,100.00
2006	\$52,800.00	\$0.00	\$52,800.00
2005	\$52,800.00	\$0.00	\$52,800.00
2004	\$52,800.00	\$0.00	\$52,800.00
2003	\$101,000.00	\$0.00	\$101,000.00
2003	\$52,000.00	\$0.00	\$52,000.00
2002	\$83,600.00	\$0.00	\$83,600.00
2001	\$83,600.00	\$0.00	\$83,600.00
2000	\$83,600.00	\$0.00	\$83,600.00
1999	\$83,600.00	\$0.00	\$83,600.00
1998	\$73,500.00	\$0.00	\$73,500.00

Improvement

This Parcel has no Improvements

2080-16

Current Owner

Current Owner: SIMMONS SHANNON L & SIMMONS LILLIAN
Purchase Date: 04/29/2016
Purchase Price: \$.00
Land Description: 31 Rural Land

Past Owner

Name: SIMMONS GARLAND L & CAROLYN P
Purchase Date: 03/04/2003
Purchase Price: \$557,760.00

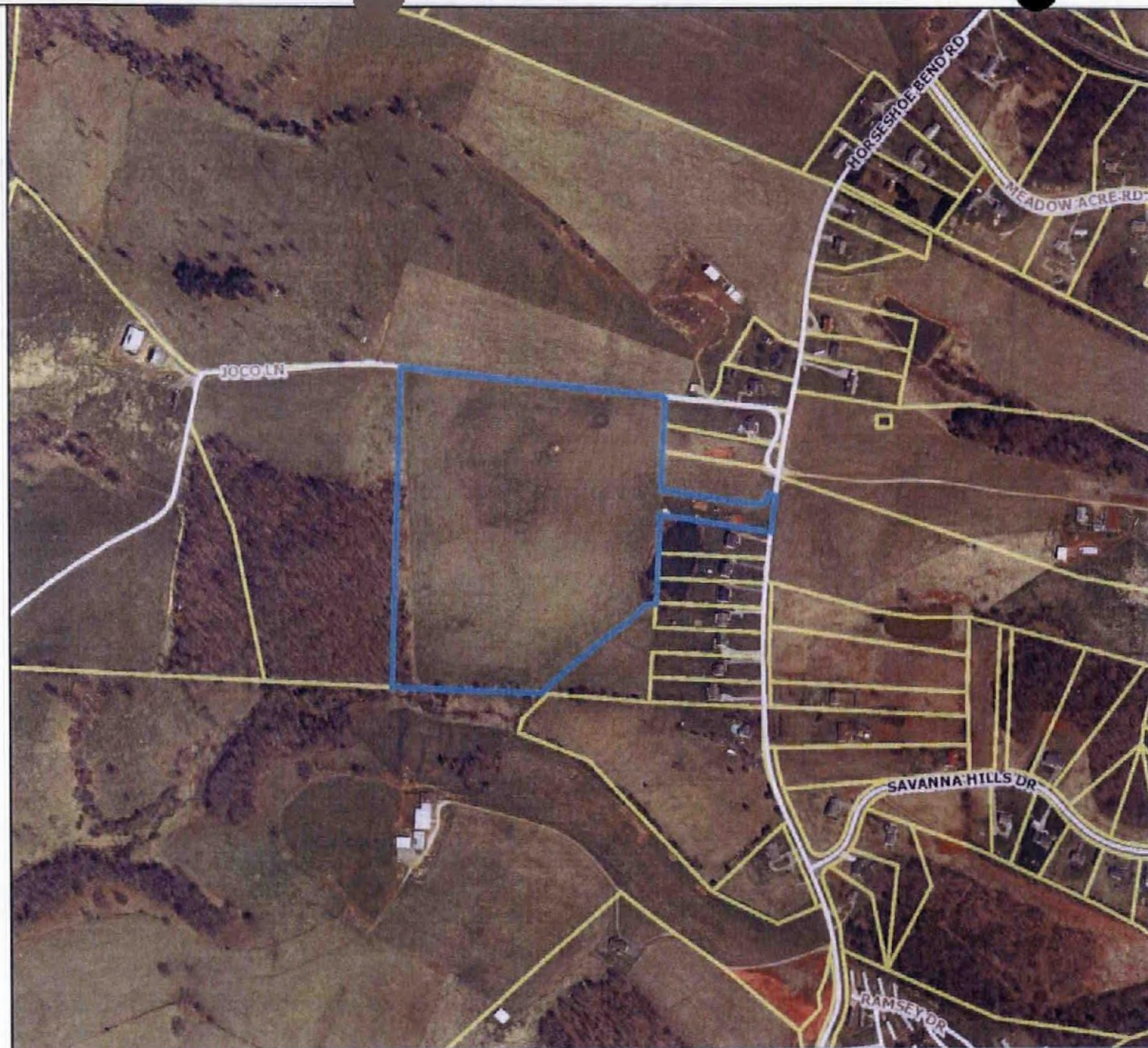
Name: JOCO FARMS TRUST FUND
Purchase Date: 12/31/1998
Purchase Price: \$.00

The County of Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

R080-16



Feet
0 200 400 600 800
1:9,028 / 1"=752 Feet

Title: Parcels - County SHANNON & LILLIAN SIMMONS 208-A-4

Date: 7/25/2016

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Bedford County, Virginia

Tax Map #: 208 A 1

Link: 208 A 1

Parcel
Number(RP
C): 20800000

Address:

Parcel Information

Owner : SIMMONS SHANNON L & SIMMONS
LILLIAN

Additional Owner: No Data

Owner Address: 1833 JOCO LANE MONETA VA 24121

Legal Acreage: 20.1800

PCDesc: 5 Agricultural/Undeveloped(20-99ac)

Legal Description: TRACT 20 PB 42/296

Document Number: 160003611

Valuation Information

Map : 208 A 1

Name: SIMMONS GARLAND L & CAROLYN
P

Acreage: 20.18

Deedbook No Data

Deedpage: No Data

Year	Land Value	Improvement Value	Total Value
2016	\$100,900.00	\$0.00	\$100,900.00
2015	\$100,900.00	\$0.00	\$100,900.00
2014	\$100,900.00	\$0.00	\$100,900.00
2013	\$100,900.00	\$0.00	\$100,900.00
2012	\$100,900.00	\$0.00	\$100,900.00
2011	\$100,900.00	\$0.00	\$100,900.00
2010	\$100,900.00	\$0.00	\$100,900.00
2009	\$100,900.00	\$0.00	\$100,900.00
2008	\$100,900.00	\$0.00	\$100,900.00
2007	\$100,900.00	\$0.00	\$100,900.00
2006	\$34,800.00	\$0.00	\$34,800.00
2005	\$34,800.00	\$0.00	\$34,800.00
2004	\$34,800.00	\$0.00	\$34,800.00
2003	\$3,000.00	\$0.00	\$3,000.00
2003	\$34,800.00	\$0.00	\$34,800.00
2002	\$2,400.00	\$0.00	\$2,400.00
2001	\$2,400.00	\$0.00	\$2,400.00
2000	\$2,400.00	\$0.00	\$2,400.00
1999	\$2,400.00	\$0.00	\$2,400.00
1998	\$1,200.00	\$0.00	\$1,200.00

Improvement

This Parcel has no Improvements

2080-17

Current Owner

Current Owner: SIMMONS SHANNON L & SIMMONS LILLIAN
Purchase Date: 04/29/2016
Purchase Price: \$.00
Land Description: 31 Rural Land

Past Owner

Name: SIMMONS GARLAND L & CAROLYN P
Purchase Date: 03/04/2003
Purchase Price: \$557,760.00

Name: JOCO FARMS TRUST FUND
Purchase Date: 12/31/1998
Purchase Price: \$.00

The County of Bedford, VA

Legend

Highway

Blue Ridge Parkway

US Primary

Virginia Primary

Roads

Parcels - County

Parcels - Town

Public School Boundary

R080-17



Feet

0 200 400 600 800
1:9,028 / 1"=752 Feet

Title: Parcels - County SHANNON & LILLIAN SIMMONS 208-A-1 Date: 7/25/2016

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Bedford County, Virginia

Tax Map #: 208 A 2

Link: 208 A 2

Parcel
Number(RP
C): 20800100

Address:

Parcel Information

Owner : SIMMONS SHANNON L & SIMMONS
LILLIAN
Additional Owner: No Data
Owner Address: 1833 JOCO LANE MONETA VA 24121

Legal Acreage: 39.2800
PCDesc: 5 Agricultural/Undevl(20-99ac)
Legal Description: TRACT 22 PB 42/296
Document Number: 160003611

Valuation Information

Map : 208 A 2
Name: SIMMONS GARLAND L & CAROLYN
P
Acreage: 39.28

Deedbook No Data
Deedpage: No Data

Year	Land Value	Improvement Value	Total Value
2016	\$187,300.00	\$52,100.00	\$239,400.00
2015	\$187,300.00	\$52,100.00	\$239,400.00
2014	\$187,300.00	\$52,100.00	\$239,400.00
2013	\$187,300.00	\$52,100.00	\$239,400.00
2012	\$187,300.00	\$52,100.00	\$239,400.00
2011	\$187,300.00	\$52,100.00	\$239,400.00
2010	\$176,800.00	\$44,600.00	\$221,400.00
2009	\$176,800.00	\$44,600.00	\$221,400.00
2008	\$176,800.00	\$44,600.00	\$221,400.00
2007	\$176,800.00	\$44,600.00	\$221,400.00
2006	\$63,400.00	\$21,600.00	\$85,000.00
2005	\$63,400.00	\$21,600.00	\$85,000.00
2004	\$63,400.00	\$21,600.00	\$85,000.00
2003	\$53,300.00	\$21,600.00	\$74,900.00
2003	\$63,400.00	\$21,600.00	\$85,000.00
2002	\$42,600.00	\$21,600.00	\$64,200.00
2001	\$42,600.00	\$21,600.00	\$64,200.00
2000	\$42,600.00	\$21,600.00	\$64,200.00
1999	\$42,600.00	\$21,600.00	\$64,200.00
1998	\$28,400.00	\$0.00	\$28,400.00

2080-18
2080-19

Improvement

Structure use:	No Data	Rooms Total:	No Data
Building Type:	No Data	Bedrooms:	No Data
Frame Material:	No Data	Full Bathroom:	No Data
Exterior Cover :	No Data	Half Bathroom:	No Data
Exterior Cover:	No Data	Attic:	No Data
Year Built:	No Data	Heating:	No Data
Stories :	No Data	Cooling :	No Data
Foundation:	No Data	Roof:	No Data
Finish Size Sq Ft:	No Data	Roof Material:	No Data
Basement Sq Ft:	No Data	Masonry Fireplace :	No Data
Garage Sq Ft:	No Data	Condition:	No Data
Detached Garage Sq Ft:	No Data		
DeckSq Ft:	0		

Current Owner

Current Owner: SIMMONS SHANNON L & SIMMONS LILLIAN
Purchase Date: 04/29/2016
Purchase Price: \$.00
Land Description: 31 Rural Land

Past Owner

Name:	SIMMONS GARLAND L & CAROLYN P	Name:	JOCO FARMS TRUST FUND
Purchase Date:	03/04/2003	Purchase Date:	12/31/1998
Purchase Price:	\$557,760.00	Purchase Price:	\$.00

The County of Bedford, VA

Legend

Highway

Blue Ridge Parkway

US Primary

Virginia Primary

Roads

Parcels - County

Parcels - Town

Public School Boundary

2080-18

2080-19



Title: Parcels - County **SHANNON + LILLIAN SUMMINS 208-A-2**

Date: 7/25/2016

Feet
0 200 400 600 800
1:9,028 / 1"=752 Feet

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Bedford County, Virginia

Tax Map #: 208 A 1A

Link: 208 A 1A

Parcel
Number(RP
C): 90505219

Address:

Parcel Information

Owner : SIMMONS SHANNON L & SIMMONS LILLIAN
Additional Owner: No Data
Owner Address: 1833 JOCO LANE MONETA VA 24121

Legal Acreage: 13.4100
PCDesc: 2 Single Family Res(1-19.99ac)
Legal Description: TRACT 21
Document Number: 160003611

Valuation Information

Map : 208 A 1A
Name: SIMMONS GARLAND L & CAROLYN P
Acreage: 13.41

Deedbook No Data
Deedpage: No Data

Year	Land Value	Improvement Value	Total Value
2016	\$60,300.00	\$18,300.00	\$78,600.00
2015	\$60,300.00	\$18,300.00	\$78,600.00
2014	\$60,300.00	\$18,300.00	\$78,600.00
2013	\$60,300.00	\$18,300.00	\$78,600.00
2012	\$60,300.00	\$18,300.00	\$78,600.00
2011	\$60,300.00	\$18,300.00	\$78,600.00
2010	\$60,300.00	\$0.00	\$60,300.00
2009	\$60,300.00	\$0.00	\$60,300.00
2008	\$60,300.00	\$0.00	\$60,300.00
2007	\$60,300.00	\$0.00	\$60,300.00
2006	\$30,800.00	\$0.00	\$30,800.00
2005	\$30,800.00	\$0.00	\$30,800.00
2004	\$30,800.00	\$0.00	\$30,800.00
2003	\$0.00	\$0.00	\$0.00
2003	\$30,800.00	\$0.00	\$30,800.00

Improvement

Structure use: No Data
Building Type: No Data
Frame Material: No Data
Exterior Cover : No Data
Exterior Cover: No Data
Year Built: No Data
Stories : No Data
Foundation: No Data
Finish Size Sq Ft: No Data
Basement Sq Ft: No Data
Garage Sq Ft: No Data
Detached Garage Sq Ft: No Data
DeckSq Ft: 0

PO 80-20
PO 80-21

Rooms Total: No Data
Bedrooms: No Data
Full Bathroom: No Data
Half Bathroom: No Data
Attic: No Data
Heating: No Data
Cooling : No Data
Roof: No Data
Roof Material: No Data
Masonry Fireplace : No Data
Condition: No Data

DISCLAIMER: This data is provided without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Any person, firm or corporation which uses this map or any of the enclosed information assumes all risk for the inaccuracy thereof. as Bedford expressly disclaims any liability for loss or damage arising from the use of said information by any third party

Current Owner

Current Owner: SIMMONS SHANNON L & SIMMONS LILLIAN
Purchase Date: 04/29/2016
Purchase Price: \$.00
Land Description: 31 Rural Land

Past Owner

Name:	SIMMONS GARLAND L & CAROLYN P	Name:	JOCO FARMS TRUST FUND
Purchase Date:	03/04/2003	Purchase Date:	11/01/2002
Purchase Price:	\$557,760.00	Purchase Price:	\$.00

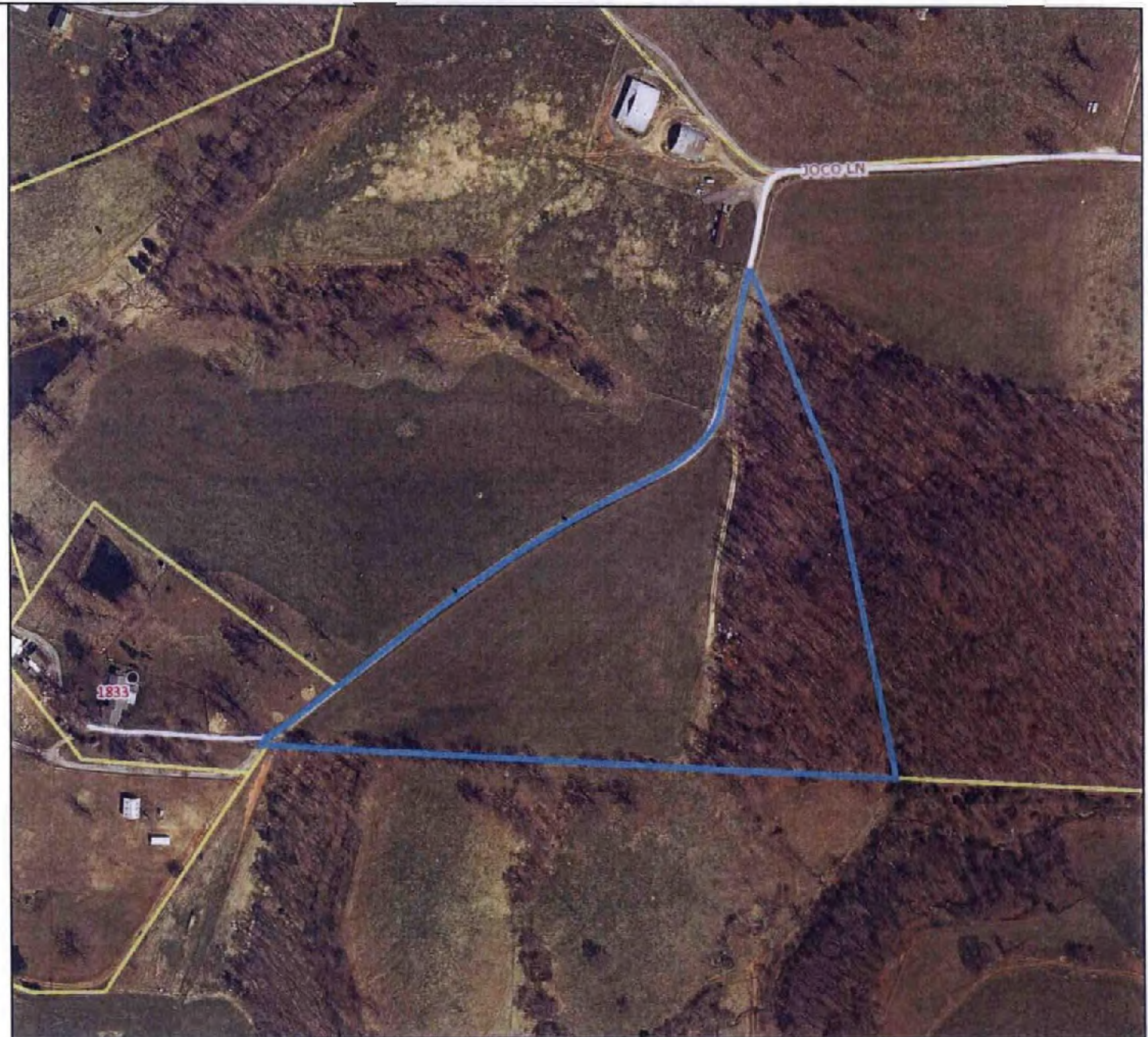
The County of Bedford, VA

Legend

- E911 Address
- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Driveway
- Parcels - County
- Parcels - Town
- Public School Boundary

R080-20

R080-21



Title: Parcels - County SHANNON + WILLIAM SIMMONS 206-A-1A

Date: 7/25/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Feet

0 100 200 300 400
1:4,514 / 1"=376 Feet

Bedford County, Virginia

Tax Map #: 208 A 3A

Link: 208 A 3A

Parcel
Number(RP
C): 20800201

Address: 1841 JOCO LANE

Parcel Information

Owner : SIMMONS SHANNON L & SIMMONS LILLIAN
Additional Owner: No Data
Owner Address: 1833 JOCO LANE MONETA VA 24121

Legal Acreage: 59.5800
PCDesc: 5 Agricultural/Undevl(20-99ac)
Legal Description: TRACT 23 PB 42/296
Document Number: 160003611

Valuation Information

Map : 208 A 3A
Name: SIMMONS GARLAND L & CAROLYN P
Acreage: 59.58

Deedbook No Data
Deedpage: No Data

Year	Land Value	Improvement Value	Total Value
2016	\$249,300.00	\$55,200.00	\$304,500.00
2015	\$249,300.00	\$55,200.00	\$304,500.00
2014	\$252,300.00	\$55,200.00	\$307,500.00
2013	\$252,300.00	\$55,200.00	\$307,500.00
2012	\$252,300.00	\$55,200.00	\$307,500.00
2011	\$252,300.00	\$55,200.00	\$307,500.00
2010	\$252,300.00	\$55,200.00	\$307,500.00
2009	\$252,300.00	\$55,200.00	\$307,500.00
2008	\$252,300.00	\$55,200.00	\$307,500.00
2007	\$252,300.00	\$55,200.00	\$307,500.00
2006	\$84,900.00	\$39,400.00	\$124,300.00
2005	\$84,900.00	\$39,400.00	\$124,300.00
2004	\$84,900.00	\$39,400.00	\$124,300.00
2003	\$78,000.00	\$39,400.00	\$117,400.00
2003	\$84,900.00	\$39,400.00	\$124,300.00
2002	\$55,800.00	\$36,300.00	\$92,100.00
2001	\$55,800.00	\$36,300.00	\$92,100.00
2000	\$55,800.00	\$36,300.00	\$92,100.00
1999	\$55,800.00	\$36,300.00	\$92,100.00
1998	\$40,800.00	\$71,700.00	\$112,500.00

2080-22
 2080-23

Improvement

Structure use:	Single family	Rooms Total:	4
Building Type:	112 Conventional	Bedrooms:	1
Frame Material:	Wood frame	Full Bathroom:	1
Exterior Cover :	Hardboard	Half Bathroom:	0
Exterior Cover:	No Data	Attic:	Part
Year Built:	1900	Heating:	Forced hot air
Stories :	1.0	Cooling :	Y
Foundation:	Full Crawl	Roof:	Gable
Finish Size Sq Ft:	784	Roof Material:	Metal
Basement Sq Ft:	0	Masonry Fireplace :	N
Garage Sq Ft:	No Data	Condition:	F
Detached Garage Sq Ft:	No Data		
DeckSq Ft:	168		

Current Owner

Current Owner:	SIMMONS SHANNON L & SIMMONS LILLIAN
Purchase Date:	04/29/2016
Purchase Price:	\$.00
Land Description:	31 Rural Land

Past Owner

Name:	SIMMONS GARLAND L & CAROLYN P	Name:	JOCO FARMS TRUST FUND
Purchase Date:	03/04/2003	Purchase Date:	12/31/1998
Purchase Price:	\$557,760.00	Purchase Price:	\$.00

The County of Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

PO80-22
PO80-23



Feet
0 200 400 600 800
1:9,028 / 1"=752 Feet

Title: Parcels - County SHANNON & ULLIAN SIMMONS 208-A-3A

Date: 7/25/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Landowner Coordination Form

Permittee: Bio-Nomic Services

County or City: Bedford County

(Signatures not required on this page)

[illegible]

Shannon Simmons Farm

Bio-Nomic Services, Inc. is filing this application to apply approved (VA0025020) Class B biosolids to this designated farm land in Bedford County, Virginia.

The farm is located in the Moneta community off the Horseshoe Bend Road near Diamond Hill Store in a predominately agricultural area. All streams, drainage features, rock outcrops, structures, dwellings, property lines, roadways and wells are designated and buffered as required. There is one public contact site in the vicinity of the farm. Please see the attached buffer maps for more details. Biosolids are currently being used as crop nutrients on close by farms, and have been used on this farm by another biosolids contractor.

Mr. Simmons operates his acreage for hay production or pasture, or small grain rotation. The small grain rotation is winter grain planting that is harvested as early season weed free mulch, and then followed with soybean or corn planting designated as livestock feedstock. The grass cover in the hayfields/ pastures is predominately fescue.

The current fescue hay fields are: RO 80-13, 80-14, 80-15, 80-20.

The current fescue pastures are: RO 80-1, 80-2, 80-3, 80-4, 80-5, 80-6, 80-7, 80-8, 80-9, 80-16, 80-17, 80-18, 80-19, 80-21, 80-22, 80-23.

The current small grain rotation fields are: RO 80-10, 80-11, 80-12.

Nutrient Management Plans will be written by a certified plan writer to address the application of biosolids to the designated fields that will address the most recent planned use of the fields should any changes occur in agricultural practices.



- ① **Brownlee Ave SE, Roanoke, VA 24014**
 ② **1190 Horseshoe Bend Rd, Moneta, VA 24121**

35 min, 18.0 mi

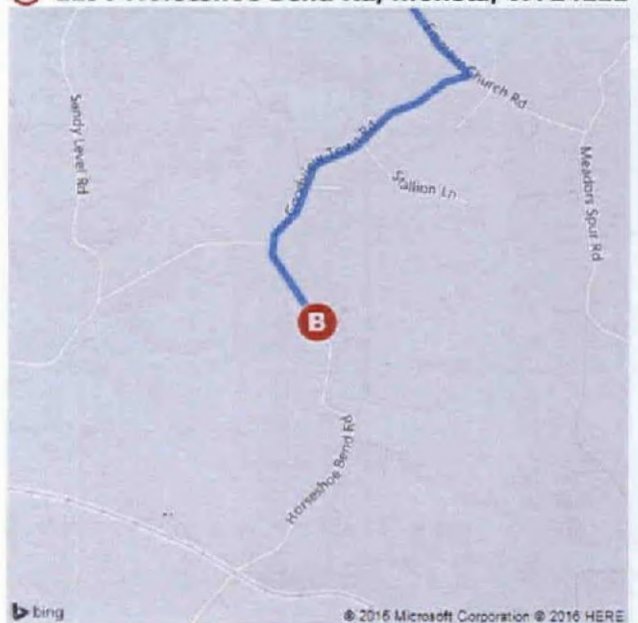
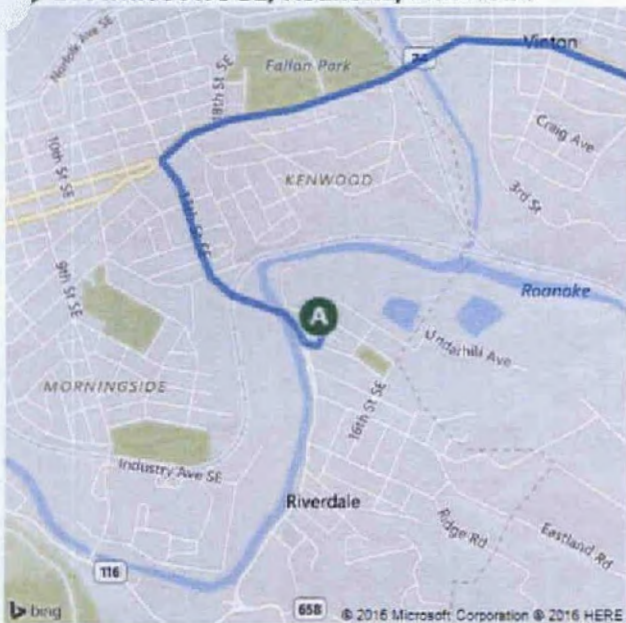
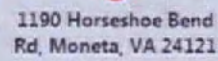
 Light traffic (32 min without traffic)
 Via VA-24, VA-24 E

 Simmons Farm
 RO 80

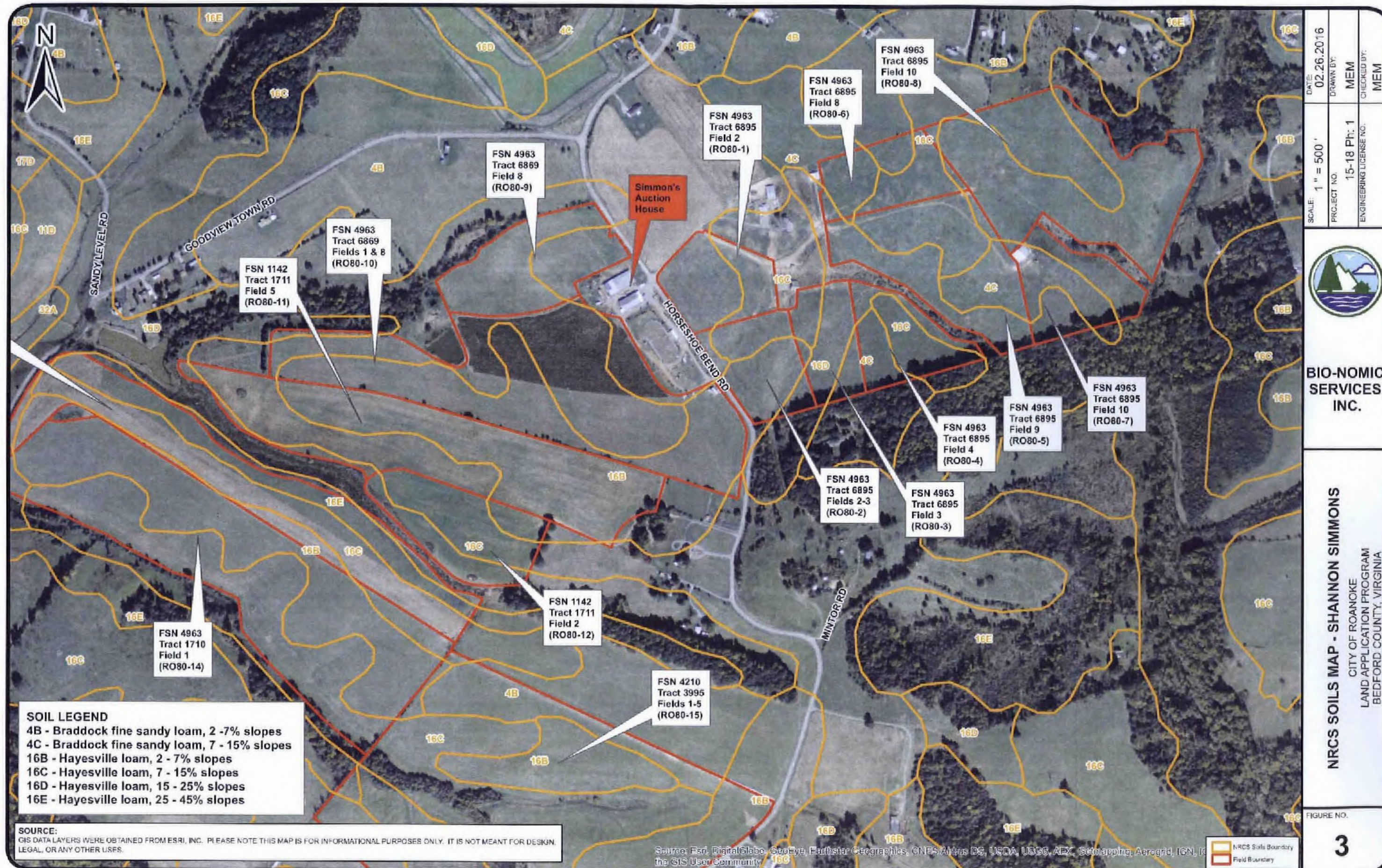
- Ⓐ **Brownlee Ave SE, Roanoke, VA 24014**

↑	1. Depart Brownlee Ave SE toward Kindred St SE	161 ft
↗	2. Turn right onto Kindred St SE	479 ft
↗	3. Turn right onto Carlisle Ave SE , and then immediately turn right onto Bennington St SE	0.8 mi
↗	4. Turn right onto VA-24 Pass Hess in 1.0 mi	2.2 mi
↑	5. Keep left to stay on VA-24 E / Bypass Rd	0.4 mi
↗	6. Turn right to stay on VA-24 E Pass Exxon in 4.4 mi	12.4 mi, 17 min
↗	7. Turn right onto Emmaus Church Rd	0.9 mi
↗	8. Turn right onto Goodview Town Rd	0.9 mi
↙	9. Bear left onto Horseshoe Bend Rd	0.3 mi
Arrive at Horseshoe Bend Rd on the left 10. The last intersection is Goodview Town Rd If you reach Mintor Rd, you've gone too far		

- Ⓑ **1190 Horseshoe Bend Rd, Moneta, VA 24121**



These directions are subject to the Microsoft® Service Agreement and are for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2016 HERE™.



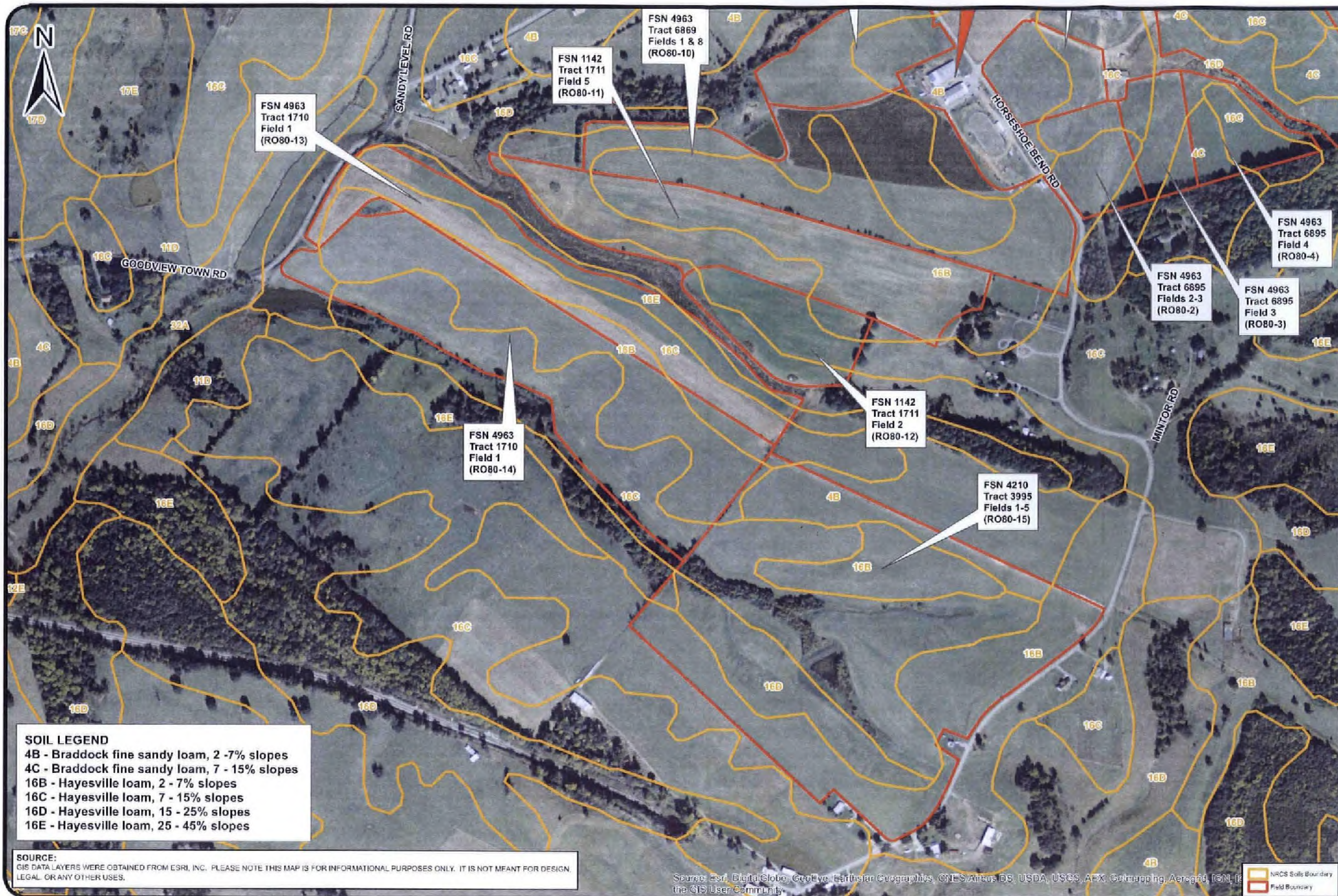
SOIL LEGEND
4B - Braddock fine sandy loam, 2 - 7% slopes
4C - Braddock fine sandy loam, 7 - 15% slopes
16B - Hayesville loam, 2 - 7% slopes
16C - Hayesville loam, 7 - 15% slopes
16D - Hayesville loam, 15 - 25% slopes
16E - Hayesville loam, 25 - 45% slopes

SOURCE:
GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, IGC, the GIS User Community

NRCS Soils Boundary
Field Boundary

	DATE: 02.26.2016	SCALE: 1" = 500'
	DRAWN BY: MEM	PROJECT NO. 15-18 Ph: 1
	CHECKED BY: MEM	ENGINEERING LICENSE NO.
BIO-NOMIC SERVICES, INC.		
NRCS SOILS MAP - SHANNON SIMMONS CITY OF ROANOKE LAND APPLICATION PROGRAM BEDFORD COUNTY, VIRGINIA		
FIGURE NO. 3		



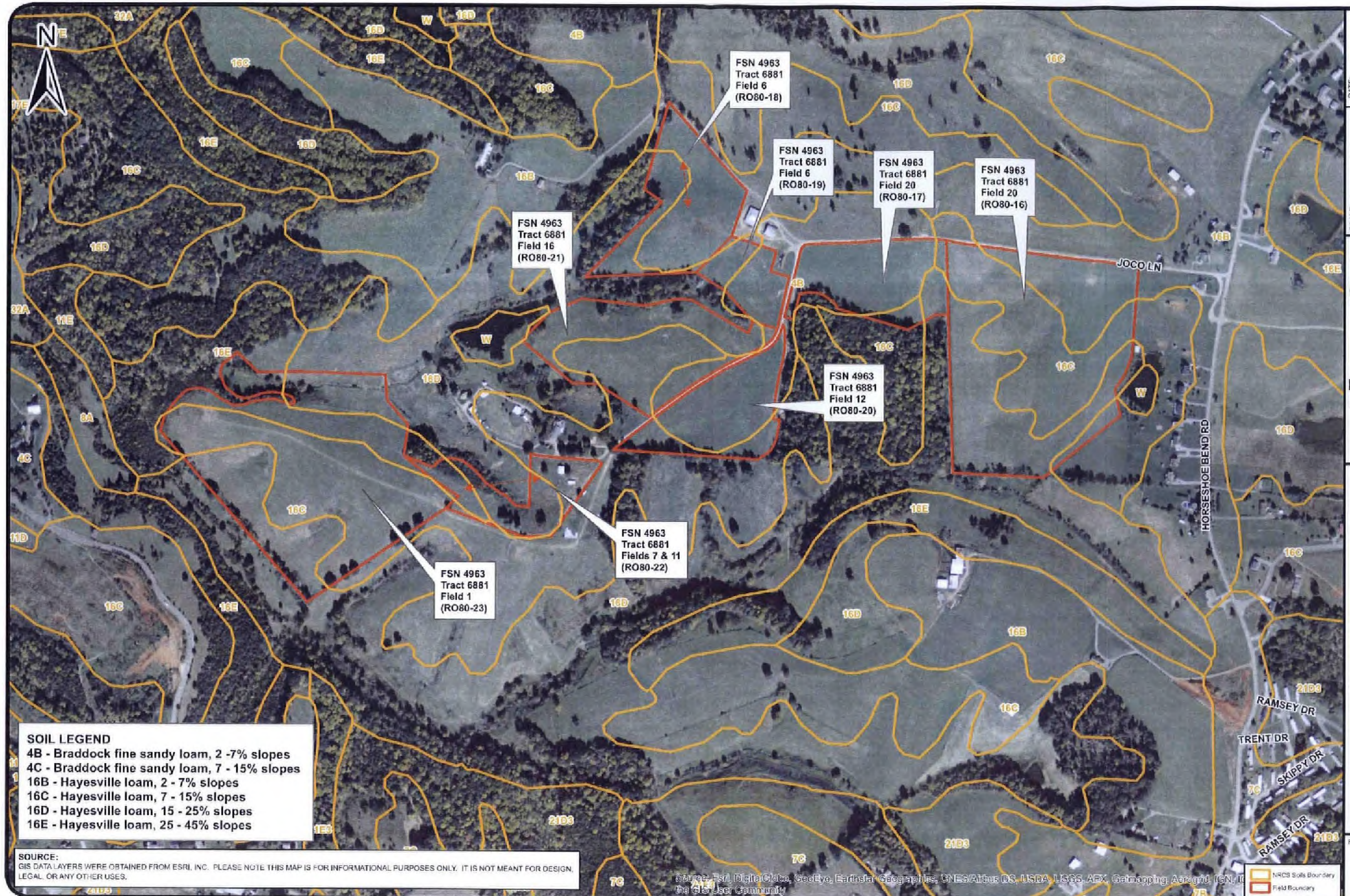
DATE: 02.26.2016	DRAWN BY: MEM
PROJECT NO. 15-18 Ph: 1	CHECKED BY: MEM
SCALE: 1" = 500'	ENGINEERING LICENSE NO.


BIO-NOMIC SERVICES, INC.

NRCS SOILS MAP - SHANNON SIMMONS
CITY OF ROANOKE
LAND APPLICATION PROGRAM
BEDFORD COUNTY, VIRGINIA

FIGURE NO. **4**

C:\virg\ja2009\1588-09-059 Bio-nomics\Shannon Simmons\Maps\NRCS1.mxd



SOIL LEGEND
4B - Braddock fine sandy loam, 2 - 7% slopes
4C - Braddock fine sandy loam, 7 - 15% slopes
16B - Hayesville loam, 2 - 7% slopes
16C - Hayesville loam, 7 - 15% slopes
16D - Hayesville loam, 15 - 25% slopes
16E - Hayesville loam, 25 - 45% slopes

SOURCE:
GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

NRCS Soils Boundary
Field Boundary


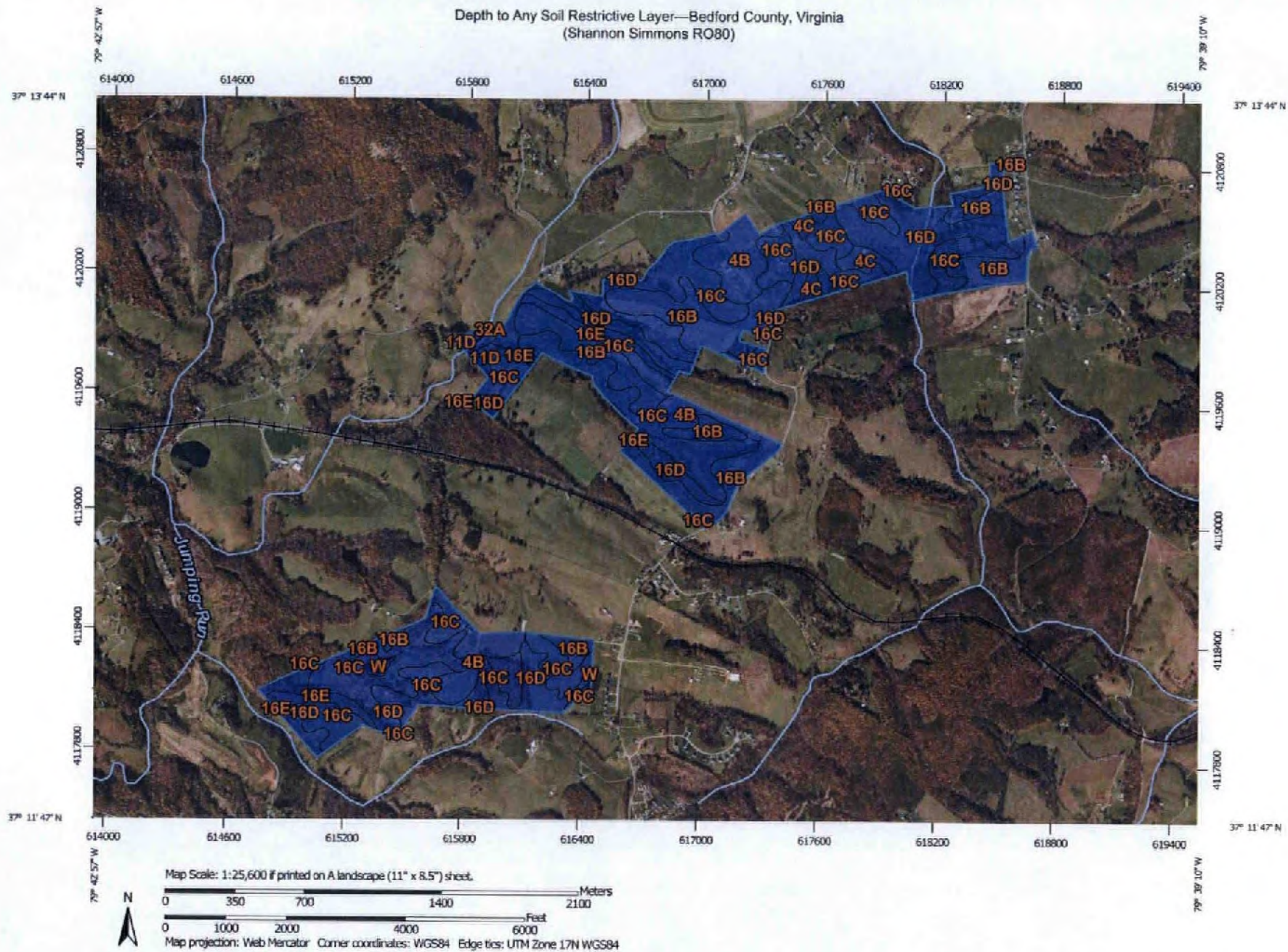
	
BIO-NOMIC SERVICES, INC.	
NRCS SOILS MAP - SHANNON SIMMONS CITY OF ROANOKE LAND APPLICATION PROGRAM BEDFORD COUNTY, VIRGINIA	
DATE: 02.26.2016	DRAWN BY: MEM
SCALE: 1" = 500'	CHECKED BY: MEM
PROJECT NO. 15-18 Ph: 1	ENGINEERING LICENSE NO.

FIGURE NO. **5**

C:\arcgis\2008\1588-09-059 Bio-nomics\Shannon Simmons\Map\NRCS2.mxd

Depth to Any Soil Restrictive Layer—Bedford County, Virginia
(Shannon Simmons R080)



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

2/25/2016
Page 1 of 4

Depth to Any Soil Restrictive Layer—Bedford County, Virginia
(Shannon Simmons RO80)

MAP LEGEND



MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Virginia
Survey Area Data: Version 11, Dec 11, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2010—Mar 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Depth to Any Soil Restrictive Layer

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Bedford County, Virginia (VA019)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
4B	Braddock fine sandy loam, 2 to 7 percent slopes	>200	48.9	8.4%
4C	Braddock fine sandy loam, 7 to 15 percent slopes	>200	11.6	2.0%
11D	Edneytown loam, 15 to 25 percent slopes	>200	3.2	0.6%
16B	Hayesville loam, 2 to 7 percent slopes	>200	122.7	21.2%
16C	Hayesville loam, 7 to 15 percent slopes	>200	205.9	35.5%
16D	Hayesville loam, 15 to 25 percent slopes	>200	160.9	27.8%
16E	Hayesville loam, 25 to 45 percent slopes	>200	21.0	3.6%
32A	Toccoa sandy loam, 0 to 2 percent slopes	>200	3.2	0.6%
W	Water	>200	2.3	0.4%
Totals for Area of Interest			579.7	100.0%

Description

A "restrictive layer" is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers.

This theme presents the depth to any type of restrictive layer that is described for each map unit. If more than one type of restrictive layer is described for an individual soil type, the depth to the shallowest one is presented. If no restrictive layer is described in a map unit, it is represented by the "> 200" depth class.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

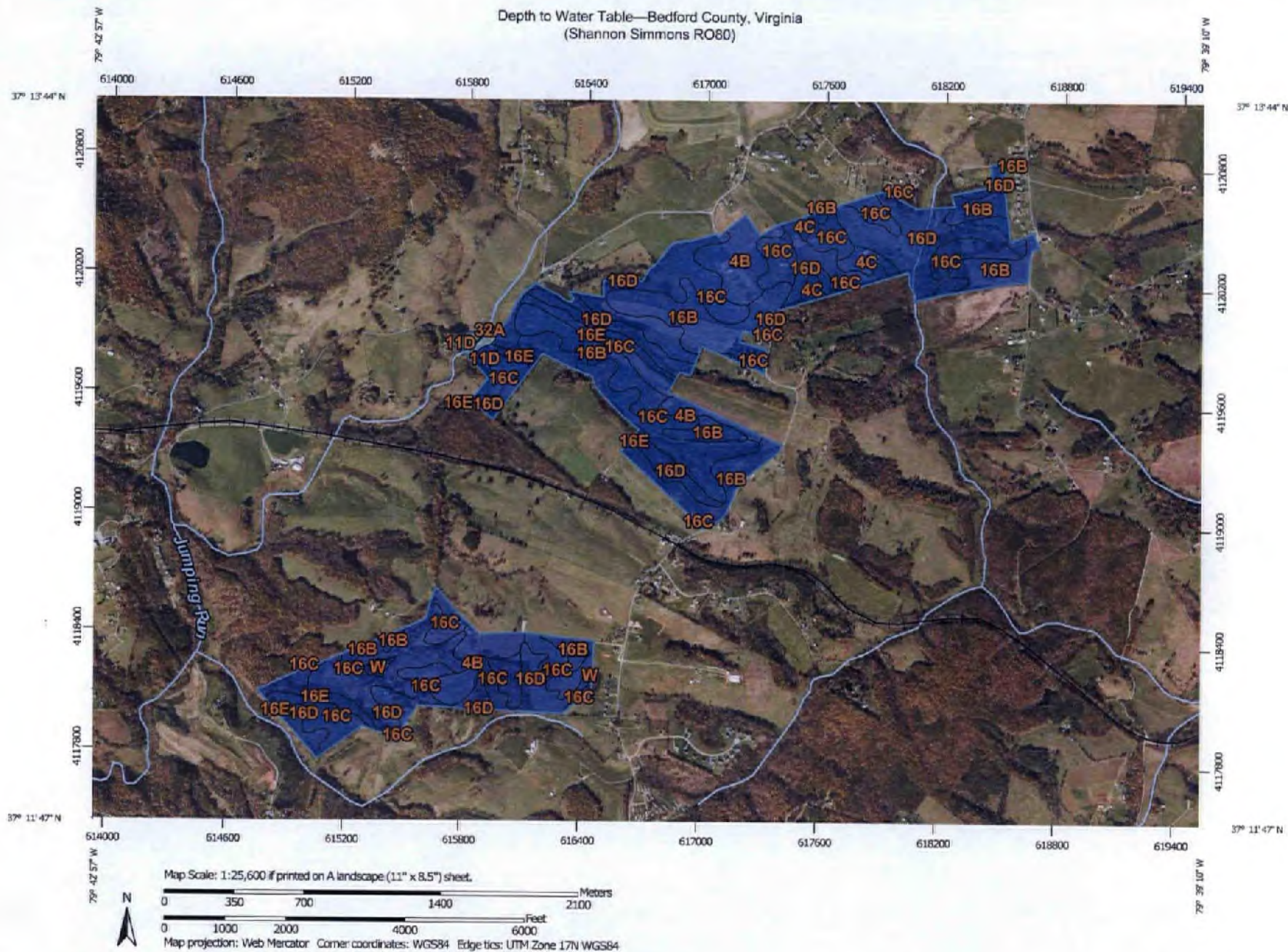
Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Depth to Water Table—Bedford County, Virginia
(Shannon Simmons RO80)



Map Scale: 1:25,600 if printed on A landscape (11" x 8.5") sheet.

0 350 700 1400 2100 Meters

0 1000 2000 4000 6000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge ties: UTM Zone 17N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

2/25/2016
Page 1 of 4

MAP LEGEND

 Area of Interest (AOI)	 Not rated or not available
Soils	Water Features
Soil Rating Polygons	 Streams and Canals
 0 - 25	Transportation
 25 - 50	 Rails
 50 - 100	 Interstate Highways
 100 - 150	 US Routes
 150 - 200	 Major Roads
 > 200	 Local Roads
 Not rated or not available	Background
Soil Rating Lines	 Aerial Photography
 0 - 25	
 25 - 50	
 50 - 100	
 100 - 150	
 150 - 200	
 > 200	
 Not rated or not available	
Soil Rating Points	
 0 - 25	
 25 - 50	
 50 - 100	
 100 - 150	
 150 - 200	
 > 200	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Virginia
Survey Area Data: Version 11, Dec 11, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2010—Mar 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Water Table

Depth to Water Table— Summary by Map Unit — Bedford County, Virginia (VA019)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
4B	Braddock fine sandy loam, 2 to 7 percent slopes	>200	48.9	8.4%
4C	Braddock fine sandy loam, 7 to 15 percent slopes	>200	11.6	2.0%
11D	Edneytown loam, 15 to 25 percent slopes	>200	3.2	0.6%
16B	Hayesville loam, 2 to 7 percent slopes	>200	122.7	21.2%
16C	Hayesville loam, 7 to 15 percent slopes	>200	205.9	35.5%
16D	Hayesville loam, 15 to 25 percent slopes	>200	160.9	27.8%
16E	Hayesville loam, 25 to 45 percent slopes	>200	21.0	3.6%
32A	Toccoa sandy loam, 0 to 2 percent slopes	114	3.2	0.6%
W	Water	>200	2.3	0.4%
Totals for Area of Interest			579.7	100.0%

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

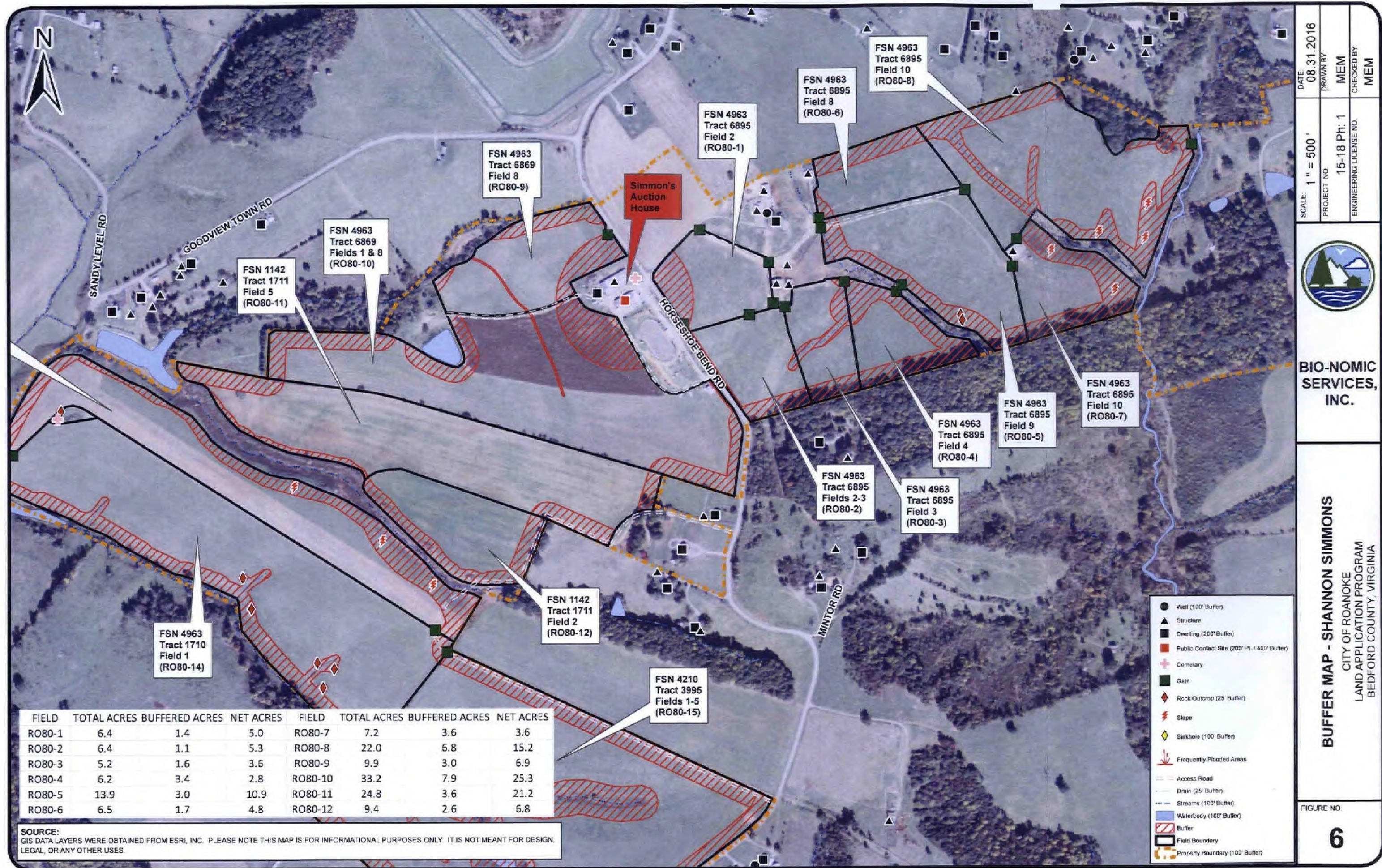
Component Percent Cutoff: None Specified

Tie-break Rule: Lower


Interpret Nulls as Zero: No

Beginning Month: January

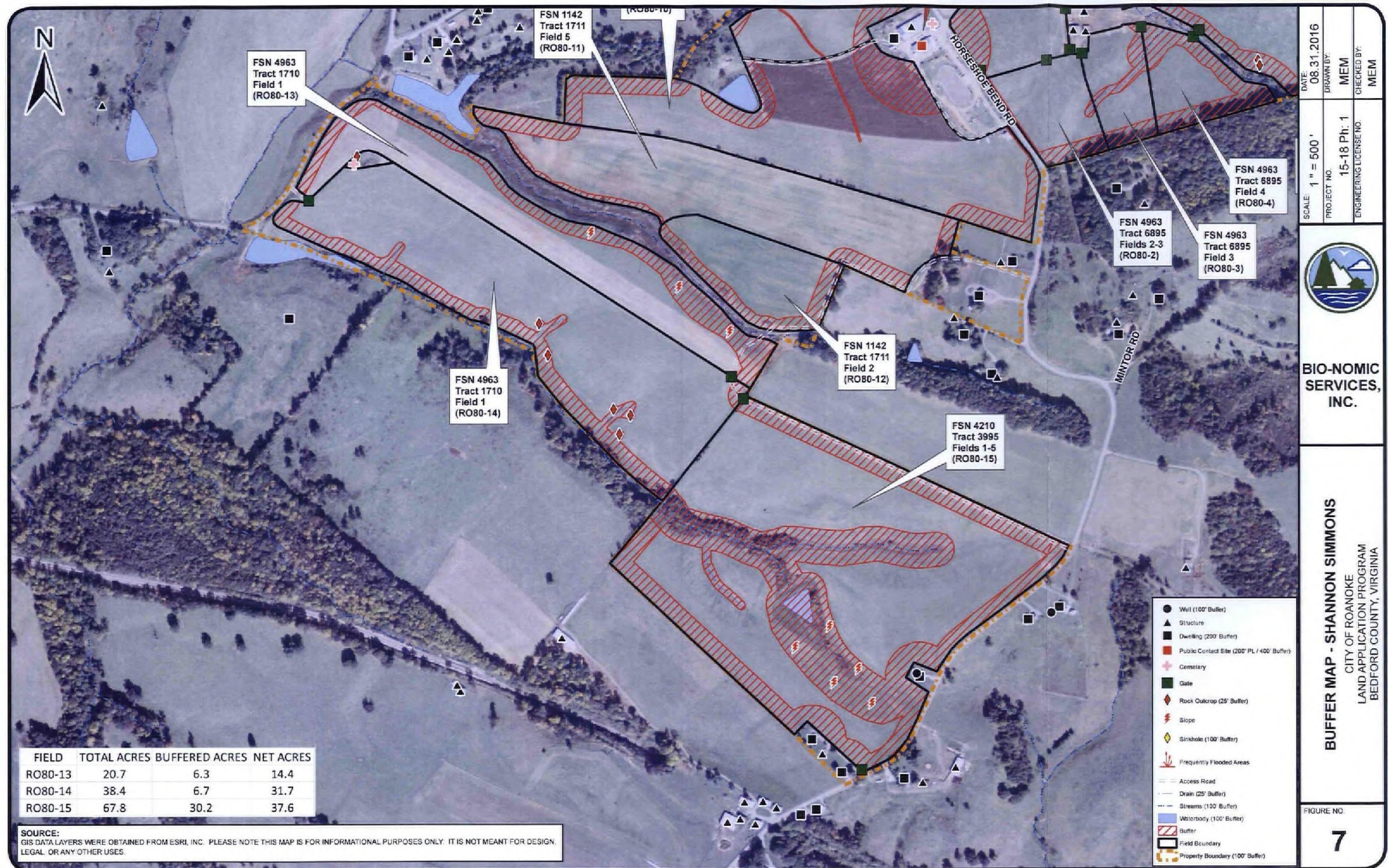
Ending Month: December



DATE: 08.31.2016
DRAWN BY: MEM
CHECKED BY: MEM
SCALE: 1" = 500'
PROJECT NO: 15-18 Ph. 1
ENGINEERING LICENSE NO:


BIO-NOMIC SERVICES, INC.

BUFFER MAP - SHANNON SIMMONS
CITY OF ROANOKE
LAND APPLICATION PROGRAM
BEDFORD COUNTY, VIRGINIA
FIGURE NO. **6**



FIELD	TOTAL ACRES	BUFFERED ACRES	NET ACRES
RO80-13	20.7	6.3	14.4
RO80-14	38.4	6.7	31.7
RO80-15	67.8	30.2	37.6

SOURCE:
GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

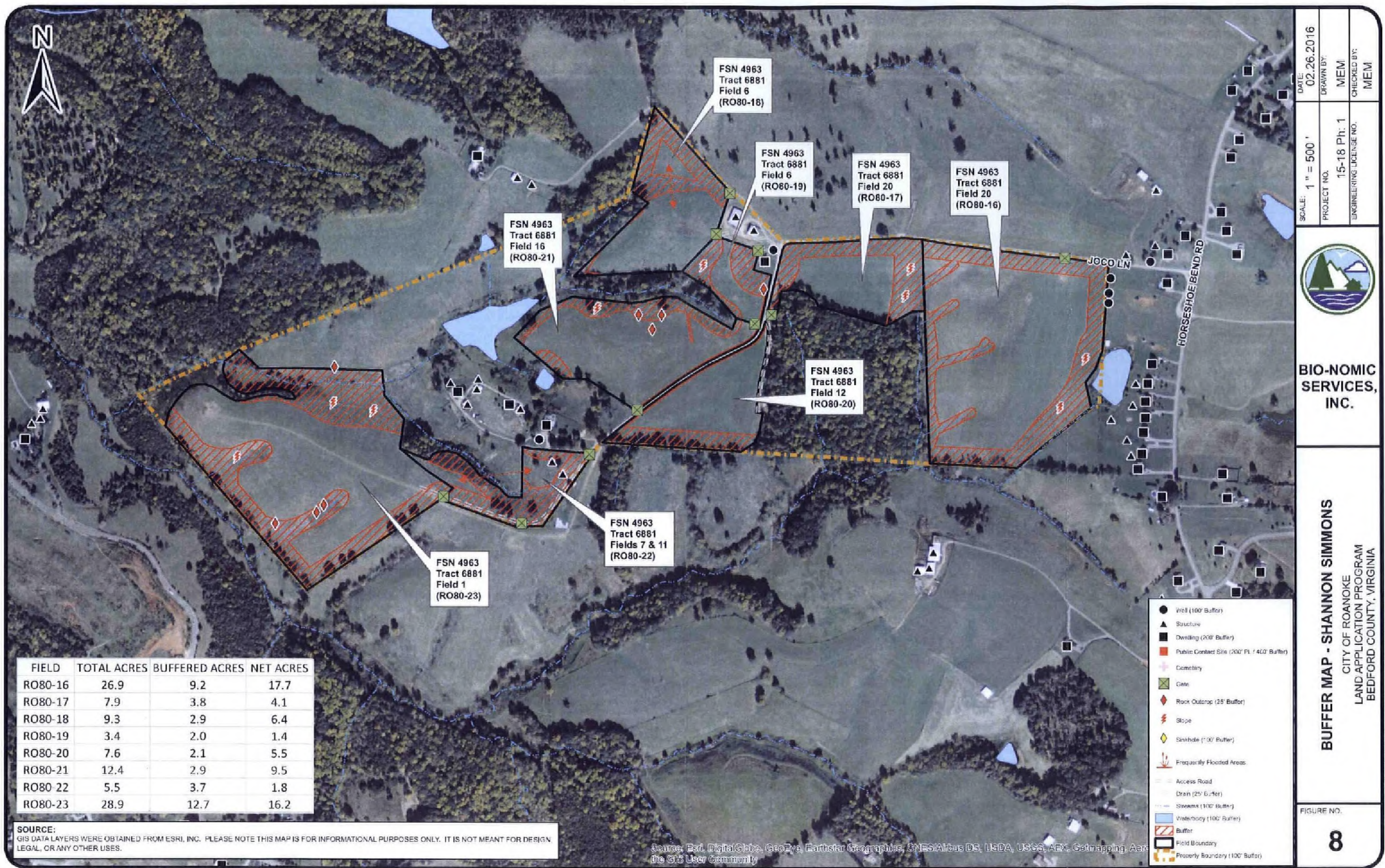
BUFFER MAP - SHANNON SIMMONS
CITY OF ROANOKE
LAND APPLICATION PROGRAM
BEDFORD COUNTY, VIRGINIA

FIGURE NO.
7

DATE: 08.31.2016
DRAWN BY: MEM
PROJECT NO: 15-18 Ph: 1
ENGINEERING LICENSE NO:
CHECKED BY: MEM



BIO-NOMIC SERVICES, INC.



FIELD	TOTAL ACRES	BUFFERED ACRES	NET ACRES
RO80-16	26.9	9.2	17.7
RO80-17	7.9	3.8	4.1
RO80-18	9.3	2.9	6.4
RO80-19	3.4	2.0	1.4
RO80-20	7.6	2.1	5.5
RO80-21	12.4	2.9	9.5
RO80-22	5.5	3.7	1.8
RO80-23	28.9	12.7	16.2

SOURCE:
GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Aero, GeoMapping, Aero, the GIS User Community



BIO-NOMIC SERVICES, INC.

BUFFER MAP - SHANNON SIMMONS
CITY OF ROANOKE
LAND APPLICATION PROGRAM
BEDFORD COUNTY, VIRGINIA

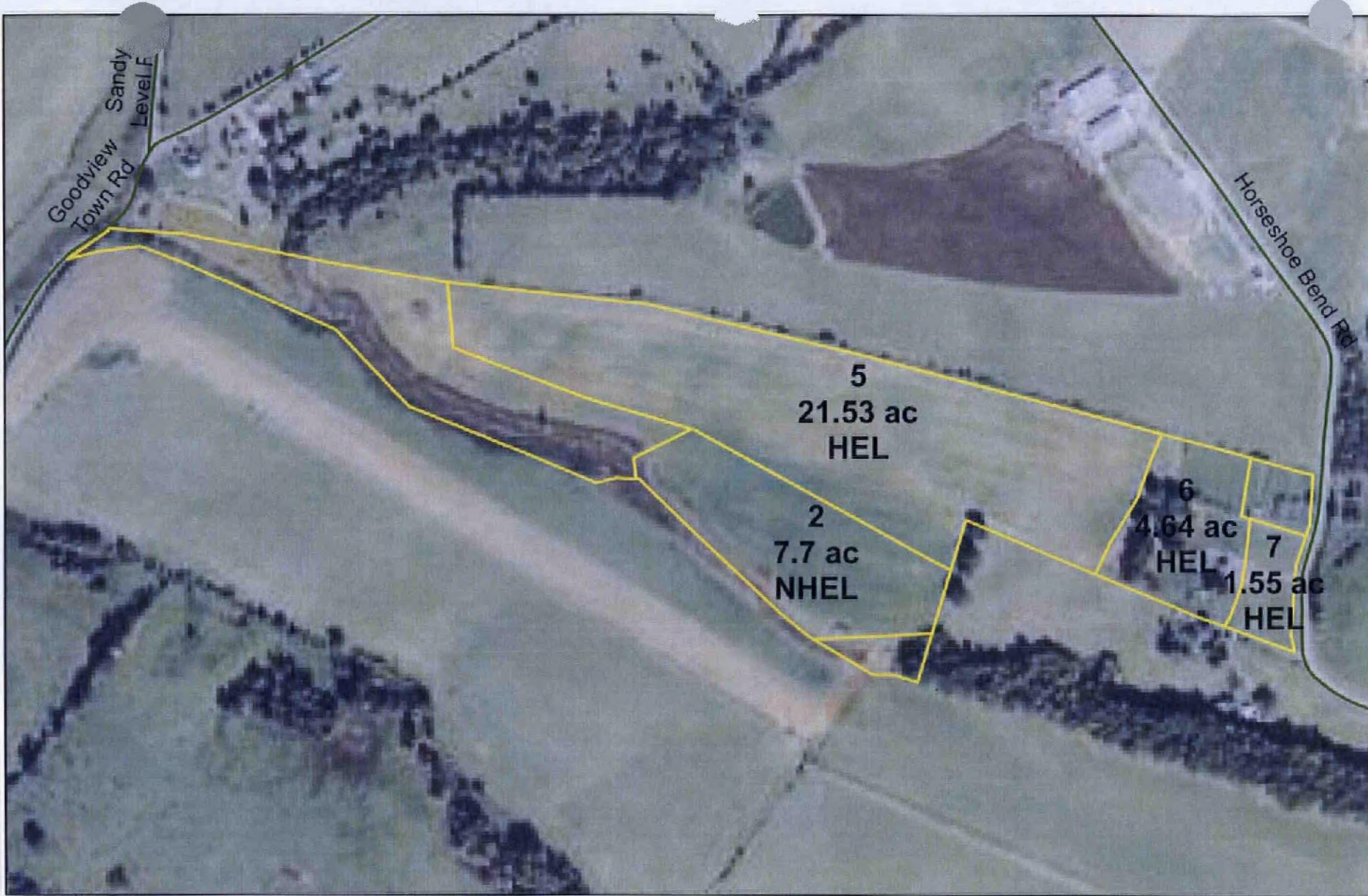
FIGURE NO.
8

DATE: 02.26.2016
DRAWN BY: MEM
CHECKED BY: MEM

SCALE: 1" = 500'

PROJECT NO. 15-18 Ph: 1
ENGINEERING LICENSE NO.

C:\projects\2009\1588-09-059 Bio-nomics\Shannon Simmons\Map\Buffer2.mxd



1 inch = 416 feet

Farm: 1142
Tract: 1711

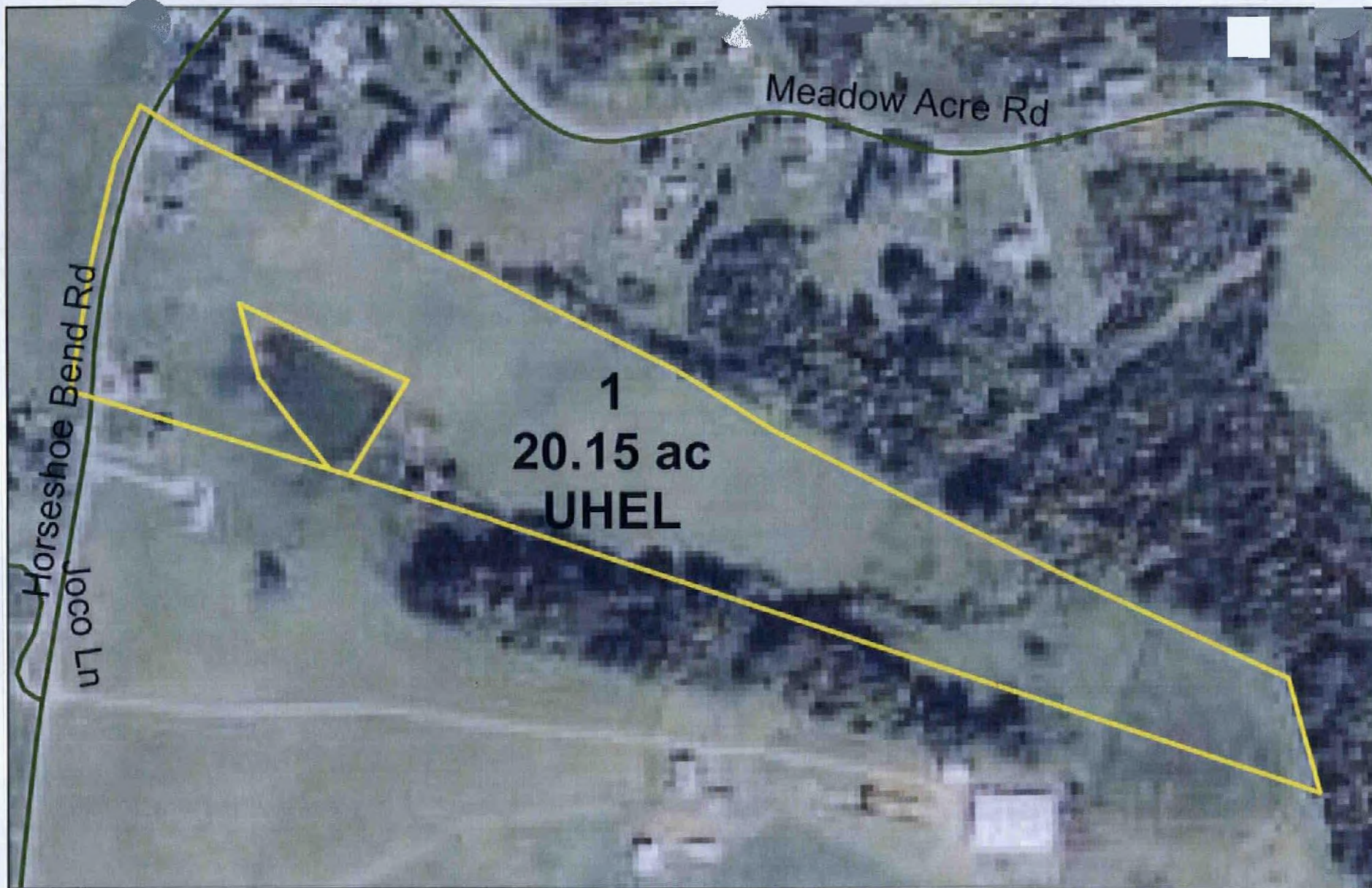


Bedford County, VA

Wetland Identification Map
 Wetland Use
 Wetland Boundary
 Wetland Identification Map

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Jan. 13, 2016



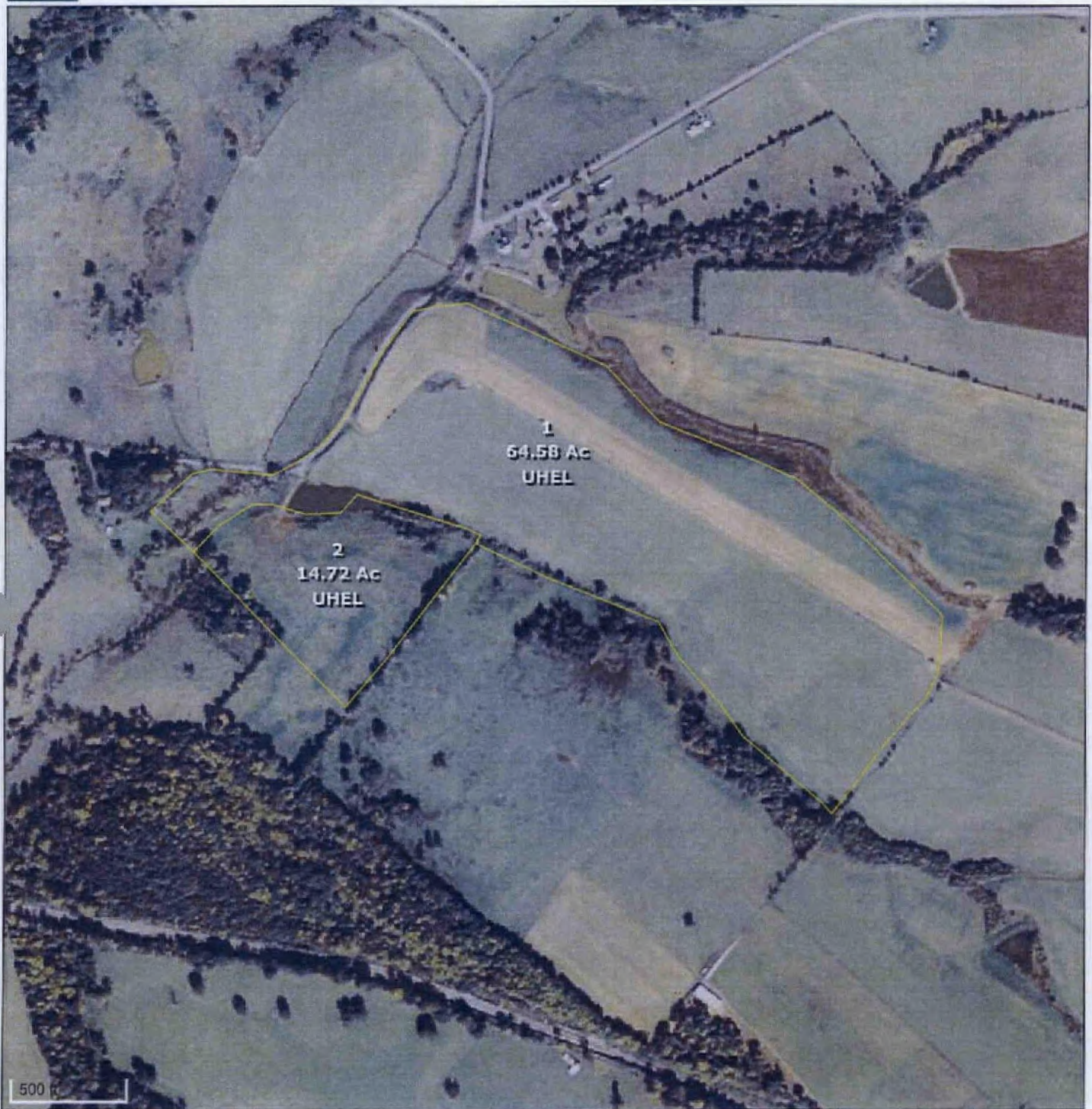
Farm: 4210
Tract: 6863



Bedford County, VA

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Jan 5, 2015



Common Land Unit
 Cropland Non-cropland

Wetland Determination Identifiers

- Restricted Use
- ▼ Limited Restrictions
- Exempt from Conservation Compliance Provisions

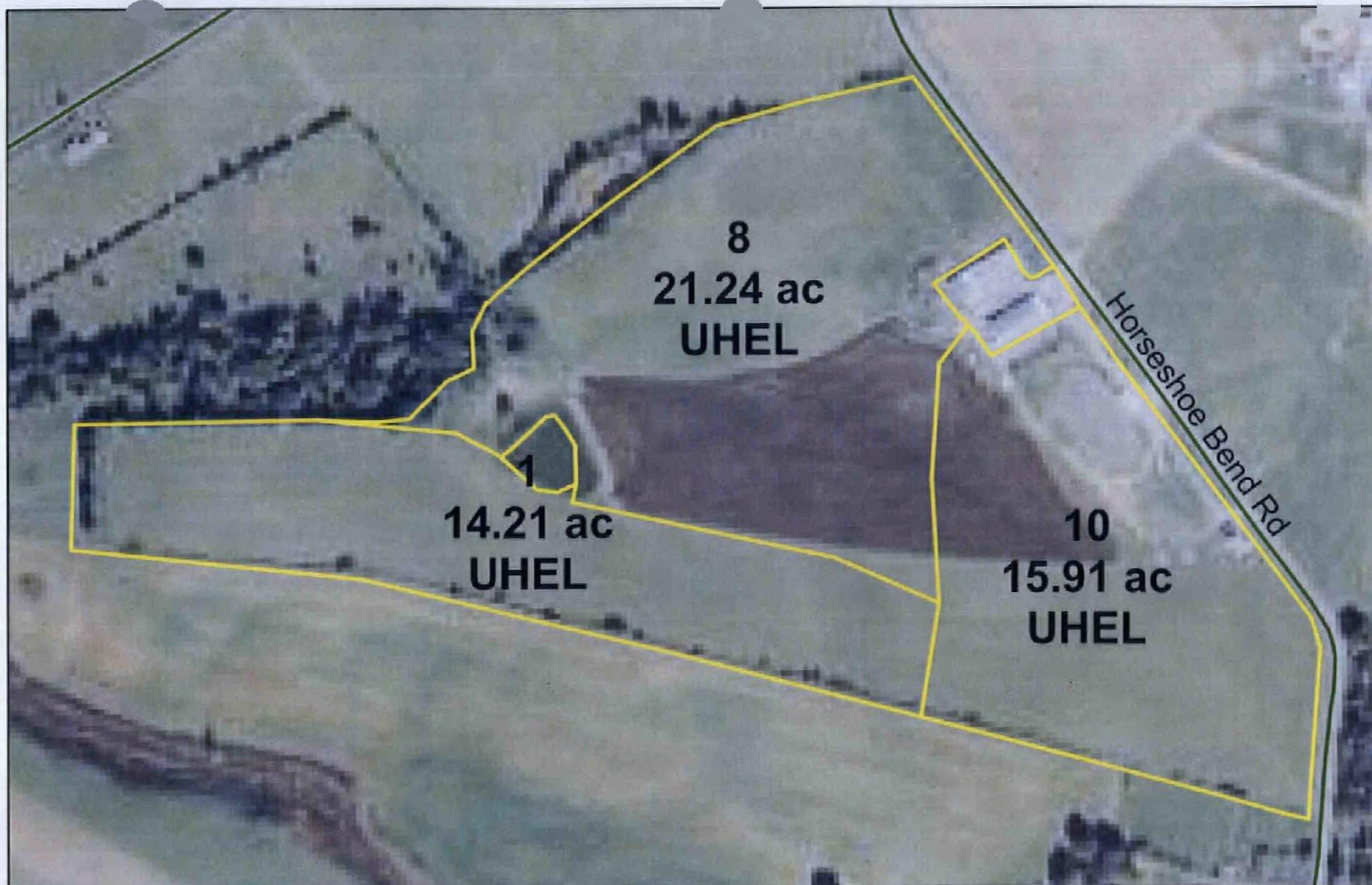
2016 Crop Year



Tract Page: 1 of 1

Farm 4963
Tract 1710

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1 inch = 293 feet

Farm: 4963
Tract: 6869



Bedford County, VA

Wetland Determination Map

- Protected Use
- Limited Public Access
- Private Landowner's Compliance Plan

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Jan 5, 2015



1 inch = 585 feet

Farm: 4963
Tract: 6881

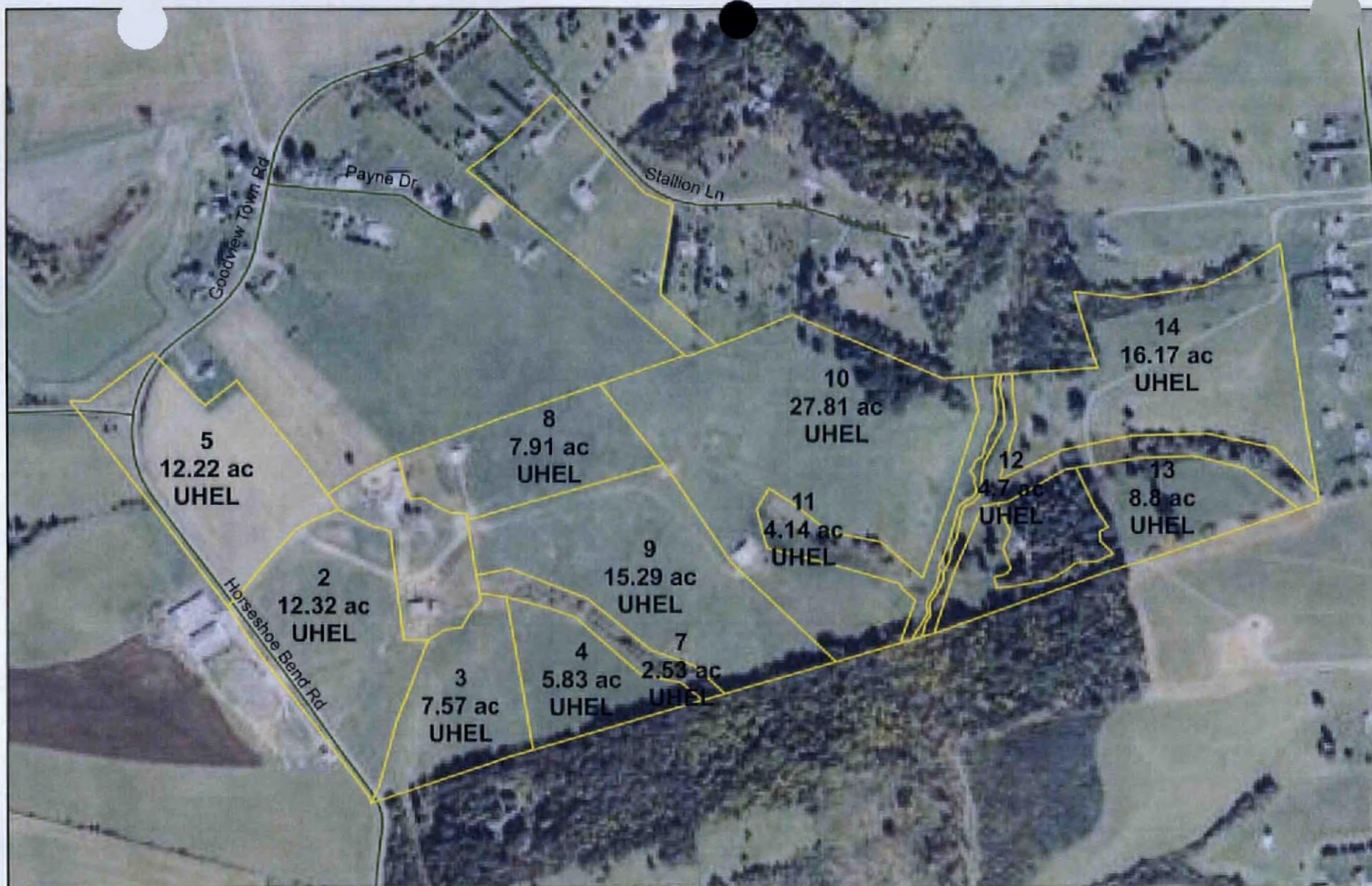
Wetland Determination Map
 Wetland Use
 Wetland Use
 Wetland Use

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



Bedford County, VA

Dec. 29, 2015



1 inch = 538 feet

Farm: 4963
Tract: 6895

Wetland Determination Method



Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



Bedford County, VA

Dec. 29, 2015

Report Number: 16-098-0509

Account Number: 45671



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Joel Coert

516 ROUNDTREE RD

CHARLOTTE NC 28217

"Every acre...Every year."™

Grower: SIMMONS

Submitted By: DON GREENE

Farm ID: RO-80

SOIL ANALYSIS REPORT

Analytical Method(s): Lime Index Mehlich 3 Loss On Ignition Water pH

Date Received: 04/07/2016

Date Of Analysis: 04/08/2016

Date Of Report: 04/08/2016

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
80-1	06778	3.5 M		108	91 H NC = 76			46 VL NC = 24	154 H	1055 M		5.9	6.79	1.4	8.1
80-2	06779	3.9 M		117	37 M NC = 31			40 VL NC = 20	129 M	902 M		5.6	6.76	1.7	7.4
80-3	06781	4.4 M		123	125 VH NC = 104			283 VH NC = 145	190 H	1542 H		6.7		0.5	10.5
80-4	06782	6.5 H		150	258 VH NC = 215			439 VH NC = 225	282 H	2062 H		6.7		0.6	14.4
80-5	06783	6.4 H		150	191 VH NC = 159			651 VH NC = 333	147 L	2615 H		7.0		0.0	16.0

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
80-1	1.5	15.8	65.1		17.3										
80-2	1.4	14.5	60.9		23.0										
80-3	6.9	15.1	73.4		4.8										
80-4	7.8	16.3	71.6		4.2										
80-5	10.4	7.7	81.7		0.0										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGeary*

Paucic McGroary

Report Number: 16-098-0509

Account Number: 45671



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Send To: BIO-NOMIC SERVICES INC

Joel Coert

516-ROUNDTREE RD

CHARLOTTE NC 28217

Grower: SIMMONS

Submitted By: DON GREENE

Farm ID: RO 80

SOIL ANALYSIS REPORT

Analytical Method(s): Lime Index Mehlich 3 Loss-On Ignition Water pH

Date Received: 04/07/2016

Date Of Analysis: 04/08/2016

Date Of Report: 04/08/2016

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
80-6	06784	4.3 M	MIN	124	277 VH NC = 231			369 VH NC = 189	88 L	1117 M		6.1	6.81	1.2	8.5

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
80-6	11.1	8.6	65.7		14.1										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Pauric McGroary*

Pauric McGroary

Report Number: 16-098-0526

Account Number: 45671



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Joel Coert

516 ROUNDTREE RD

CHARLOTTE NC 28217

Grower: SIMMONS

Farm ID: RO 80

SOIL ANALYSIS REPORT

Analytical Method(s): Lime Index Mehlich 3 Loss On Ignition Water pH

Date Received: 04/07/2016

Date Of Analysis: 04/08/2016

Date Of Report: 04/08/2016

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
80-7	06791	4.7 M	<div>MIN</div>	126	189 VH NC = 157			495 VH NC = 253	286 H	1792 M		6.9		0.2	12.8
80-8	06792	3.7 M	<div>MIN</div>	110	138 VH NC = 115			229 VH NC = 117	104 L	1567 H		6.7		0.4	9.7
80-9	06793	2.4 L	<div>MIN</div>	86	87 H NC = 72			31 VL NC = 16	78 L	1571 VH		6.9		0.1	8.7
80-10	06794	2.3 L	<div>MIN</div>	89	36 M NC = 30			18 VL NC = 9	42 L	675 M		5.5	6.80	1.3	5.1

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
80-7	9.9	18.6	70.0		1.6										
80-8	6.1	8.9	80.8		4.1										
80-9	0.9	7.5	90.3		1.1										
80-10	0.9	6.9	66.2		25.5										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

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Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGeary*

Paucic McGeary

Report Number: 16-098-0529

Account Number: 45671



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CHARLOTTE NC 28217

Grower: SIMMONS

Submitted By: DON GREENE

Farm ID: RO 80

SOIL ANALYSIS REPORT

Analytical Method(s): Lime Index Mehlich 3 Loss On Ignition Water pH

Date Received: 04/07/2016

Date Of Analysis: 04/08/2016

Date Of Report: 04/08/2016

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm	Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
80-11	06824	3.2 M	MIN	107	60 H NC = 50			50 L NC = 26	94 H	474 M		5.4	6.80	1.3	4.6
80-12	06825	2.6 M	MIN	97	37 M NC = 31			41 L NC = 21	92 H	379 L		5.5	6.83	1.0	3.8
80-13	06826	4.0 M	MIN	113	44 M NC = 37			34 VL NC = 17	88 L	2207 VH		7.4		0.0	11.9
80-14	06827	4.4 M	MIN	125	51 H NC = 42			30 VL NC = 15	74 L	1457 H		6.4		0.8	8.8
80-15	06828	3.6 M	MIN	104	61 H NC = 51			24 VL NC = 12	106 L	2380 VH		7.6		0.0	12.8

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
80-11	2.8	17.0	51.5		28.3										
80-12	2.8	20.2	49.9		26.3										
80-13	0.7	6.2	92.7		0.0										
80-14	0.9	7.0	82.8		9.1										
80-15	0.5	6.9	93.0		0.0										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucie McGroary*

Paucie McGroary

Report Number: 16-098-0529

Account Number: 45671



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Grower: SIMMONS

Submitted By: DON GREENE

Farm ID: RO 80

SOIL ANALYSIS REPORT

Analytical Method(s): Lime Index Mehlich 3 Loss On Ignition Water pH

Date Received: 04/07/2016

Date Of Analysis: 04/08/2016

Date Of Report: 04/08/2016

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C.
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm	Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
80-16	06829	3.8 M	MIN	111	112 VH NC = 93			22 VL NC = 11	132 M	1801 VH		6.8		0.3	10.5
80-17	06830	3.3 M	MIN	103	84 H NC = 70			21 VL NC = 11	81 L	1685 VH		7.0		0.0	9.2
80-18	06831	3.9 M	MIN	118	11 VL NC = 9			48 VL NC = 25	79 L	958 M		5.8	6.80	1.3	6.9
80-19	06832	3.5 M	MIN	108	136 VH NC = 113			47 VL NC = 24	54 VL	1551 VH		6.9		0.1	8.4
80-20	06833	4.7 M	MIN	130	150 VH NC = 125			24 VL NC = 12	127 M	1468 H		6.3		1.0	9.5

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
80-16	0.5	10.5	85.8		2.9										
80-17	0.6	7.3	91.6		0.0										
80-18	1.8	9.5	69.4		18.8										
80-19	1.4	5.4	92.3		1.2										
80-20	0.6	11.1	77.3		10.5										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

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Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGroary*

Paucic McGroary

Report Number: 16-098-0529

Account Number: 45671



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Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm	Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
80-21	06835	5.3 H	MIN	140	205 VH NC = 171			29 VL NC = 15	81 L	1744 H		6.1	6.78	1.5	11.0
80-22	06836	7.0 VH	MIN	150	152 VH NC = 127			269 VH NC = 138	252 M	2604 H		7.1		0.0	15.8
80-23	06837	5.3 H	MIN	139	203 VH NC = 169			228 VH NC = 117	147 M	1810 H		6.5		0.9	11.8

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
80-21	0.7	6.1	79.3		13.6										
80-22	4.4	13.3	82.4		0.0										
80-23	5.0	10.4	76.7		7.6										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

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Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGroary*

Paucic McGroary